The Builder.

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The Two Salons at Paris.

THE "Salon Meissonier" has certainly not eclipsed the old Salon. It has this advantage, that its two principal galleries contain a very large proportion of really good pictures and but a small proportion of indifferent ones, and that cannot be said of any room in the old Salon. But though the vast collection at the Palais d'Industrie undoubtedly includes a great many paintings that are uninteresting and some that are vulgar, the actual amount of striking and powerful works collected is nevertheless, as before observed, a most remarkable testimony to the vitality of French painting: and the collection of sculpture in the central hall is a splendid one. In this latter branch of art the division in the camp has not operated at all, the new Salon containing hardly any sculpture; as indeed it could hardly be expected that sculptors would turn their backs on a site with such exceptional advantages in regard to space and light as the central court of the Palais d'Industrie, to send their works to a comparatively narrow gallery with an unsatisfactory light. Accordingly, while the weakening of the old Salon in the department of painting is not very marked, the department of sculpture is in full force and has seldom been finer and more interesting than in the present year.

In the vestibule hangs M. Martin's enormous painting representing the visit of the President of the Republic to Agen, one of the class of realistic paintings executed in flat tints and in very raw colour, which have become a feature in French decorative painting (so-called) of late, but which are in fact neither pictorial nor decorative in the true sense. Two paintings which are decorative in the true sense find place here; M. Michel-Lançon's decorative composition representing "France," "Force," "Paix," "Industrie moderne couronée par le Génie du Progrès," and all the rest of it, and on the other side M Lematte's "Saint Vladimir et Sainte Olga aux Pieds de la Vierge"; both in semicircular lunettes, the former representing secular the latter ecclesiastical decorative work; the former the best drawn, the latter the richer in colour. Among the smaller works relegated to the vestibule and not of much importance, M. Chas. Landelle's "Fleurs de France," a half-length of a young woman leaning over a window-sill on which red white and blue flowers are shown, is worth mention not only as a very pretty work but as one which seems to be regarded as one of the popular successes of the exhibition, from the number of photographs of it going about. In the central large gallery (XII.) opening out of the vestibule, hangs opposite the door the leading work of the year in point of size and ambitious aim, M. Munkacsy's huge painting for the ceiling of the Art Museum at Vienna—a huge mistake. It is a ceiling-painting on the old fallacious *de sotto in sù* principle, in which we look up a staircase surrounded by a dome through which the sky is seen: all the figures and balustrades, &c., being seen as foreshortened from below. The subject is an allegory of the Italian Renaissance, and includes portrait figures of some of the great painters of the Renaissance, prominent among whom is Titian instructing another artist in painting from the nude figure who forms the salient point of the composition. Over all, under the eye of the dome, hovers a winged figure, the genius of the Renaissance. Hung vertically, the picture of course looks absurd; when fixed in its proper position it will no doubt show a certain power and largeness of conception of a not very refined order; but as a ceiling decoration it is heavy in effect without being rich in colour, besides the radical error of this method of designing ceiling decoration. Viennese taste, however, will not prove exacting in regard to these little matters. Another central work in this gallery is M. Jules Lefebvre's "Lady Godiva," one of those works in which a whole street of houses is painted full-size, with Godiva's horse in the foreground, led by a female attendant whose dark robes and brunette complexion serve as a foil to the blonde figure of the lady seated sideways on the horse. This attempt to realise the whole scenic surroundings of the story is worth something in its way, whether worth such an immense area of canvas may be another question; and what should be the central interest of the picture, the expression of Godiva, is a failure; a stubborn resolution seems to be what is intended, but there is a suspicion of coquetry mixed with it which is fatal to the sentiment of the story. The other centre places are occupied by M Lehoux' "Christ Accueillant les Ouvriers de la Miséricorde" (one of a series), a decorative picture in a fresco-like style and with an alarming preponderance of blue in the shadows, and a figure of Christ rather theatrical in attitude; and M. H. L. Lévy's allegorical painting of the City of Paris offering to Liberty the sacrifice of her children slain in the cause. This is a confused mass of figures not well made out, though with a fine energy of action about the foreground figure of "Paris." The other large room (XXI.) at the west end contains the other works which are on such a scale as to require a great space to be seen, but none of them have merit or interest at all proportionate to their size; M. Biesbroeck's "Launching of the Argo" is an immense picture showing the fore part of the ship in side elevation and a number of men hauling at her with considerable vigour and variety of action, but the picture is essentially an academical study of nude figures in action. M. Poujol's painting of Dante seeing Paolo and Francesca in the circle of sinners is powerful as a representation of Dante's lurid conception of the mass of spirits swept away in a storm, but none of the figures are of interest separately, nor can those of Paolo and Francesca be readily disentangled from the mass. M. le Quesne's "The Legend Kerdeck" is a picture of a man enticed into the sea by (to borrow an expression of Daudet's) "a whole marmalade" of nymphs, who writhe and tumble about in the usual way. On another wall is Benjamin-Constant's picture of "Beethoven—le sonate au clair de lune," a melodramatic representation of the composer surrounded by a party of his friends and playing in a room lighted only by moonlight; rather striking as a piece of effect, but another instance of the absurd ignorance of painters as to the subjects they select, the whole story of the composition of the sonata by moonlight being a mere invention, and the title of "Moonlight Sonata" having only risen out of the passing fancy of some critic whose phrase hit the popular taste: but anything to make a sensational picture! A large decorative painting in the same room by M. Dupain, for the ceiling of a picture gallery in a private house—"Le Commerce apporte la Paix et l'Abondance aux Arts et à l'Industrie," has considerable merit as a decorative composition, and is refined in style and colour.

The principal contribution of M. Bouguereau, who is in a sense the leader of the

old Salon, is a painting of "The Holy Women at the Sepulchre" in Room XVI.,* a perfect example of the ordinary type of biblical picture carried to its highest point of execution; the three women stand looking into the door of the tomb, which is lighted within from the radiance shed by the angel, a very commonplace angel indeed, but the faces of the three women have a sweet languid pathos about them, and their full dark draperies are beautifully disposed and drawn; in short, this is a perfect type of the art of learned and refined mediocrity. Of this serious class of subject, such as is included under the terms of religious or historical painting, there is not much in the Salon. In French exhibitions the place of historical painting is now mainly occupied by what may be called "life-size *genre*," and a great mistake, as to scale, much of this is. Among the few historical pictures is M. Gide's "Galileo Explaining his Discoveries to the Venetian Senate," (Salle XIII.) a very well-studied little picture of a subject which would have borne a larger scale. On the other hand we have immense paintings representing two or three rustics sitting at a cottage door, or something of that kind; good enough in their way, but containing no quality or sentiment that could not as well have been shown or expressed on a small scale. In this respect English painters show more common sense than many of the French; they have more perception of the proportion between scale and subject. No doubt they are under a wholesome practical restriction in this respect, for if they painted on the scale of the French *genre* pictures they could get hung nowhere for want of room. Among the pictures which come under the class of historical paintings, or figure subjects other than *genre*, are such as the large picture by M. René Gilbert, the starting of a balloon during the siege of Paris (Salle XIX.), a class of paintings the object of which seems to be to record in a life-size painting the plain facts of the incident, without any attempt at a pictorial composition. Here again there seems no gain whatever from the size of the painting; it is simply painted up to Salon scale, to ensure its being seen. M. Hardie's "Bénédiction de la Mer" (XV.), a comparatively small picture illustrating a rather favourite subject with French painters, is a good work, as also another church subject, not of the present day, M. Mélida's "Procession de Pénitents en Espagne dans le XVII. Siècle" (V.). The penitents, girt with sheets and bare to the waist, and with variously stolid expressions, come down the steps of a church between two parties of clerics.

Then there is M. Vibert's scene from the "Malade Imaginaire" (XVI.), a delightful piece of humour in its contrast (perhaps a trifle overdrawn) between the rubicund face of the *malade* and the serious countenance of the doctor; as far as the execution of the work is concerned the artist has done better than this, but it is a real piece of comedy. M. Pierrey's "Le Nuit de Noël" (VI.) is another of the large "religious" pictures for which there seems to be a certain demand still; an attempt at a moonlight effect contrasting with the supernatural light from inside the manger or shed: it is rather a sensational performance. M. Richemont's "La Rêve" (VIII.) is a scene from Zola's novel under that name, curious in colour and texture but expressive. M. Scherrer's "Duval d'Esprémenil" (XIV.) is a life-size historical painting of the old school, and of no little force and power; the scene is at the moment when d'Esprémenil was brought into the Corps de Garde at the Palais Royal after being half-killed by the mob; his wife hangs over him, and he says to his friend Pétion, the Mayor of Paris, "I too, Pétion, have been an idol of the people;" the point of the scene, powerfully pourtrayed, lies in that sentence and its application. M. Van den Bos' picture of "L'Héritier" (XVI.), perhaps in reality a couple of portraits, is a most striking picture of a lady with a noble and proud action laying her hand on the head of her boy; a very unusual work. So certainly is Mr. Veber's "St. Sébastien" (XXII.), bound to a tree and with a pagan public making faces at him, a treatment of the subject which seems rather like a bad joke, on which disproportionate canvas has been expended.

Among figure subjects not *genre* must also be counted the numerous nude studies always found at the Salon, generally well executed, sometimes poetic and refined, sometimes prosaic and commonplace, sometimes unhappily coarse and vulgar. In this category are some of the best pictures of the year however. Highest in the scale certainly are M. Benner's "Soir d'Été" (XXVIII.), a woman lying on the grass, and his "Dans la Grotte Verte" (XXVI.), a lovely nymph upright in the half light of a cavern; for M. Benner does not merely paint nudity, but grace and sentiment of pose and countenance; there is a poetry in his figures and in the tender dreamy expression of their faces which belongs entirely to the region of ideal painting and is quite out of the category of "life studies." M. Boyé has made a fine kind of bravura picture in his "Hippodamie" (XXVIII.), a naked woman bringing two great horses to drink; and Mr. Comerre's "Bain d'Alhambra" (XXIII.) is a splendid work of its kind—a highly decorative Moorish interior in which all the architectural details are shown with the greatest force and brilliancy, forming a background to the figure of a white woman, just emerged from the bath and with her back to the spectator, and a dark Moorish woman seated on the floor. M. Deully's "Après la péché" (XXVII.) is a work rising to more than mere nude painting, as also M. N. A. Laurens's "Nocturne" (IX.), showing two women seated in the moonlight, beautifully composed as a group, their bodies blanched in the white moonlight, and listening to music from a third more shadowy figure in the rear. M. Ménard's "À la Tombée du Jour" (V.) is an idyll of rosy-tinted figures in the evening light amid a rich arcadian scene. To go from the poetic to the realistic one may turn to M. Mousset's "La Toilette" in the same gallery, an admirably-painted picture at all events, and in which the "French matron" seems to take great interest; the "Figure Nue" of M. Doucet (XXIII.) is still better painted, and as a mere piece of painting is a truly remarkable work, it is a real living and breathing body with the life blood throbbing in it, though sensuous enough in sentiment (or want of sentiment). Among others that are out of the commonplace are M. Benjamin Constant's splendidly-painted "Victrix" (XX.) with its sumptuous accessories; M. Edouard's "Odalisque" (XXIII.); M. Hodebert's prettily-composed "Rêve d'Azur" (XXIII.), a young girl seated in a most graceful attitude by the sea with her back to the spectator; M. Georges Landelle's "Libellule" (XIX.) a pretty fancy of a flying woman's figure with dragon-flies' wings; M. Peel's "Après le Bain" (IV.) two dear little urchins warming themselves before the fire; M. L. Perrault's "Venus" (VIII.) with a poetic quotation from De Musset, but the poetry is all in the quotation, the figure is a very good life study, and that is all; and M. Émile Renard's "Le Sommeil" (VI.) another child-picture of a little girl asleep, a lovely little thing both in feeling and execution, and which is one of the complete successes of this year's Salon.

Of the pictures included under the general term of *genre* there are of course an immense number, and it is only possible to mention a few of the best examples. M. Bisson's life-size group, "Après l'Opération" (XX.) is one of the best of those medical subjects the French have taken to of late years. The principal figures are no doubt portraits, that of the doctor who sits feeling the pulse of the patient is remarkable for its expression of intellect and sympathy. The same painter's "La Cigale" (XVIII.), a half-length of a cloaked young woman with a lute, amid falling snow, is a pretty fancy and is one of the popular pictures of the year. At the head of this class of pictures, however, is certainly the "Pêcheur" (VIII.) of M. Tattegrain, a painter whose remarkable talent is far too little known on this side of the Channel, and who has usually devoted himself to large historical subjects. This year he confines himself to this one painting of an old fisherman standing in the shallow water of the Bay of Authie, lifting a net from the water. The old man's face is a perfect study of character, his weather-stained hat and accoutrements are painted with the greatest truth, the brightly-lighted stretch of sea-water behind makes an effective background to the figure. M. Blayn's "Repas du Soir" (XVIII.) is one of the best specimens of the "rustic group" class of subject. Another very original and pleasing work is M. Boquet's "La Prière," where a company of young girls in blue blouses kneel about on the floor joining in the prayer read by a "sister" from the desk. There is a touching and simple feeling about this work, which is totally without affectation. The "Enfant Malade" of M. Bosch-Reitz (XVI.), where an old woman watches by the side of a cradle, betrays in its feeling and treatment the Dutch nationality of the painter, a pupil nevertheless of MM. Bouguereau and Tony Robert-Fleury. M. Brispot's "La Bouteille de Champagne" (XVI.) opened for a company for whom this is a great event, and M. Brunet's "La Chanson de la Mariée" (XXII.) are pictures that suggest a comparison with the works of Mr. Stanhope Forbes; and though they are more truly pictorial in treatment, our English artist is superior in regard to the individuality and character of the figures taken separately. "Idées Noires" (XX.) one of the pictures purchased by the "Société des Amis des Arts," is a pathetic representation of a solitary artist brooding in the half-light of a littered studio, the pictures turned with their faces to the wall. There is a pathetic power too in "L'Océan (XIV.) by M. Durangel, illustrating some lines from Victor Hugo. M. Gelhay's "Chez le Juge d'Instruction" (XV.) is a very clever study of that peculiarly French institution for tripping-up suspected criminals in a private examination. M. V. G. Gilbert's "La Valse" (XIX.) is a brilliantly-painted little ball scene in fashionable life, which may be paired off with a brilliant regatta picture by M. Gueldry (XVII.) in which the boats are well drawn as well as the people, which does not always happen in regatta pictures. M. J. P. Haag's "Un Jour de Fête" in the same room is a brightly-painted little Normandy interior. M. Lucien Simon's life-size painting, "Chez le Pharmacien" (XIV.), is another surgical scene, this time in a chemist's shop, a clever work far too large in scale for its subject. Better than this, of the same type, is M. Laurent-Gsell's interior of a chemical laboratory at the "Faculté de Médecine," a lesson to students by Dr. Thierry. In "Voisins" (IX.) M. Lobrichon depicts the friendship of two small children. M. Marec's "La Veillée" (VII.) has the honour of having been purchased by the State; it is, however, only a clever piece of lamp-light effect. M. Marre's large painting, "L'Offrande de Dimanche," in the same room, labelled with the sub-title "Pour les Âmes en Purgatoire" is a painting of a more serious type, in which the point consists in the totally stolid and indifferent faces of the worshippers from whom the alms for this solemn end are collected; it is cold and hard in colour, in what we have termed the "fresco-like" manner which is affected by some French painters at present, but it is a picture full of meaning and character. M. Moreau de Tours' "Les Fascinés de la Charité, 1889" (V.) is another medical subject, representing an experiment on the nervous system of patients in a hospital by Dr. Luys; this is one of the most carefully-studied works in the exhibition; every figure tells its own tale. The "Pauvre Enfant" (III.) of M. Pelez, the painter of rags and miseries, is a masterpiece in its way, a painting of a miserable little *gamin* who has

* We will give the number of the room in which each picture is to be found in the course of these remarks; the number of the picture it is little use to give, as it may be anywhere, but the rooms at least are numbered consecutively.

apparently hurt his knee by a fall; the figure, painted with painful realism, is sharply relieved against a nearly white wall surface; there are no accessories of any kind to draw the eye from the one figure. There is perhaps a certain affectation of being pathetic in this, but it is a remarkable work nevertheless. M. Picard's "Repos du Soir" (III.) is another of the immense life-size groups of rustics whose figures have no special interest or character, and which, well enough painted, take up space out of all proportion to their interest. M. Roger's "La Fête de la Patrone," in the same room, equally large in scale, has more point and interest, partly from its peculiar manner of execution in half-tints, giving the effect of a flood of light in which details are lost; but it is after all a gigantic sketch rather than a picture.

Among works of pure idealism may be mentioned M. Henner's beautiful female head entitled "Mélancolie" (XIII.), M. Jacquet's "L'Araignée" (XXV.), a woman catching birds with a net shown in the shape of a spider's-web—an odd fancy which seems to have been rather a success; M. Luminais' "Rapt" (IX.), a powerful picture of a man on horseback carrying off a woman dragged on to the horse behind him, the horse is seen foreshortened; and Madame Luminais' ethereal figure "Le Rêve de Psyche" (III.), a very poetic nude figure rising from her couch as if endeavouring to follow some figure flying from her on wings, which one just sees receding—this is one of the nude pictures of the intellectual type, a purely poetic creation; and M. Maignan's "La Naissance de la Perle" (VII.) a brilliant but rather absurd fancy.

The most important of M. Gérome's contributions of this year may be classed among animal paintings; it is entitled "La Poursuite" (XV.), and shows a tract of sandy desert under a glaring sun, with some antelopes in the distance, and in the foreground a lion in full chase of them; the lion is in the middle of a bound, his shadow making a great blue patch on the sand beneath. The picture is a small one, but the lion seems quite as striking and impressive in his vigorous action as if he were painted life-size,—a lesson to many contemporary French painters who think that the way to show power is to paint on an immense scale. The artist's other work, "Abreuvoir," in the same gallery, a scene of camels and Arabs at a drinking-pond, is not of equal interest, but his galloping lion will not be readily forgotten. Among animal paintings of the ordinary type M. Hermann-Léon has a capital dog-picture, "Au Chenil; ceux qu'on n'emmène pas" (XIII.), and M. Alfred Paris's "Le Sucre à Coco" (VI.) is a very good horse-study: a child is held up in his father's arms to give a piece of sugar to a considerate and sober horse; there is a popular element in the picture, which will probably be largely reproduced in engraving.

Military pictures are nothing like so numerous as they used to be, but M. Detaille has one splendid one, "En Batterie" (XXIII.), painted life-size (which is unusual with him); representing a troop of artillery advancing at a gallop, the prominent figure, which really makes the picture, being that of the officer at the head of the troop, who gallops up into the foreground with his sword extended, a splendid figure, full of military ardour. M. Boutigny's "Dernière Faction" (XXVI.) is an outpost scene in an occupied village, a sentry lying dead on his back, and an officer examining the distance with a field-glass; the situation is told with great reality. M. Flameng's "L'Armée Française Marche sur Amsterdam" (XII.), a last-century scene, is a capital little painting somewhat inspired by Meissonier.

Portraits are tolerably numerous, but the best are rather remarkable for solid execution than for any special power of treatment or effect. The French in general make little effort to produce the pictorial kind of portraits on which English painters specially pride themselves, — carefully arranged "harmonies" in colour, &c.; the portraits of M. Carolus-Duran, which may seem an exception in this respect, are rather costume-portraits than pictures in the higher artistic sense; of them more anon, they are to be found in the new Salon. Among the number we can only mention a few important ones, just noticing that there is rather a run this year on portraits of artists over their work, sculptors in their studios, &c. M. Boggio's portrait of Mdme. Henri Daguerre, in her garden with her dog, is noticeable as an example of the *plein air* system in portraiture. M. Boulicaut's "M. Boysset, Député" (XXIV.), is a good specimen of the plain prose portrait, forcibly painted with no pretence at effect, and that of M. Gusman by M. Bukovac (XVI.), who has given his sitter, in a blue blouse, the homely appearance of an artisan, but with much force of expression and character. M. Flour's "Mdlle. Blanche Z——" (XV.) is one of the best of the artist portraits, a lady whose very *spirituelle* face is lighted from the reflection of a mirror over an etching-table. M. L. E. Fournier's "La Fin du Roman" (XXIII.), evidently a portrait, is charming; the lady sits with her book carelessly retained on her knee, and her face expressive of pleasant reflections arising out of the story she has been reading. M. Franzini d'Issoncourt's "Portrait de ma Mère" (XVII) is a very fine and striking work, a dark picture from which the face of the lady, who is seated facing the spectator, stands out powerfully, a great dog of the Danish mastiff breed is grouped with her, but kept in shadow so as not to obtrude; there is a kind of heroic style and feeling about this, which puts it above the level of a mere portrait. M. Giron, in his "Tons de Suie" (XIII.) has essayed Mr. Herkomer's invention of a white-draped portrait of a lady against a white ground, while in "Tons de Fumée" (XXIII.) he gives us a little portrait of a sweep in a black frame, holding an orange in his hand as a point of colour; these are rather tricks of effect, but they are clever. M. Guay's "Mon Vieux Voisin" (XXIII.) is a capital half-length portrait of an old artisan. Mr. Jardon gives a full-length portrait of "M. Jablochkoff" (XV.) in his laboratory. Mr. F. H. Lucas has a pretty portrait of two children in little blouses and with bare legs (VII.). Mdlle. Marest's "La Lettre" in the same room, evidently a portrait, is noticeable as a fine study of colour. Another variety in the way of presenting a portrait is seen in M. Maurin's "Portrait of Madame ——" (XI.), where the lady is just having her cloak put round her shoulders by her maid; and M. Mengin's "Meditation" (V.) is really a good portrait of a lady with a book in her hand. Like several of the best portraits of ladies, she is shown dressed in black; so is a still better portrait, the full-length of "Madame E. T.——" by M. Mertens, an exceedingly vigorous and dignified work, remarkable for the fine painting of face. A small portrait of a young girl on horseback, by M. Aimé Morot (VII.) is a gem of its kind, both in regard to the figure and the horse; it is emphatically a painting of a lady, whose pose is the perfection of grace and refinement. M. L. Muraton has tried an experiment in painting the portrait of a lady by lamplight (XII.), standing before a screen which partially reflects the light and throws a kind of glow round the figure; it is cleverly done and an interesting experiment. M. Penet's "L'Improvisation" (III.) is another special treatment, a portrait of a lady at the piano. Mdlle. Therese Pomey's "Portrait du Jeune H. T——," in the same room, deserves special mention, a charming and vivacious portrait of a little blonde-haired boy in knickerbockers with hat and whip in hand, strongly relieved against a white wainscot background. M. Richir's "Le Famille W——" (III.) is worth looking at, especially the baby squatted on the carpet; and M. Paul Thomas's graceful "Portrait de Mdme. ——" (VI.) seated on a park chair; Mdme. Vallet's "Portrait de ma Petite Amie Othilde Langbois" (X), remarkable both for character and colour; and M. Wencker's "Portrait of M. Boulanger" (VIII.) a worker in wrought-iron, engaged over his craft and turning a scroll on an anvil.

French landscape painting is a rather peculiar problem at present. We read statements now and again from contemporary critics that the French are quite our masters in landscape painting. This seems to be a kind of survival in criticism; it was unquestionably true fifteen or twenty years ago, perhaps even ten years ago, but it is not true now. We have been advancing while the French have been declining, having lost some of their great lights in landscape painting, who have left no adequate successors. The special power which French landscape painters show at present is in the shape of a careful study of particular effects of light and colour, especially in twilight or under dull weather. The latter condition, indeed, they seem so fond of, that all sunlight seems to have vanished out of their landscapes, with a brilliant exception here and there; and amid their desire to show what can be got out of the barest materials, a flat field or common, they seem in danger of losing the poetry of landscape altogether. Pastoral scenes with cattle are among the favourite motives. M. Claus's "Rentrée des Vaches" (XXIII.) a small procession of cows along the margin of a cornfield at the close of a summer day, is a good example of this class of work. Mr. Davis (an American by birth but completely French in artistic style and education) gives a good example of the class of study of special effects in his large work "Le Ruisseau: Effet du Soir" (XXVIII.) This is mainly a flat expanse of grass-land looking a cold green in the twilight, with a crooked brook cutting through it; as a matter of truth to nature it improves on acquaintance, but it is a very depressing kind of work. M. Duval-Gozlan has a really fine work, the large painting of "The Seine at Goulet" with a mass of trees rising in full light on the right, the flat shore and the river on the left; it has very obviously the look of a composition, but a striking and effective one. M. Flahaut's "Le Camp de César, à Puys" (XXII.) is a fine sombre effect under a dull red sunset. There are various very good little moonlight pictures, of which one (not the best) by M. Hareux (XIII.), has the honour of purchase by the State, but hardly justifies this special choice. M. Harpignies' works we missed seeing, and had only the poor satisfaction of seeing his name in the catalogue, from which, as before observed, it is impossible, on the French system, to find the picture except by accident. M. Joubert's "La Seine à Pont-de-l'Arche" (XV.) is a fine work with more sunlight in it than usual; and M. Jourdeuil's "Derniers Rayons du Soleil" (XV.), a mill and meadows with cattle, a little recalling Mr. Mark Fisher's style. M. Lièpvre's "La Loire" (XII.), a large painting where the river is seen in the distance through a sparsely-planted grove of trees, is quite an exceptional work in its appearance of sunshine and aërial freshness, though here one complains that there is really no "landscape" in the higher sense, there is grass and trees, that is all; but one at least thanks the painter for sunlight. M. Le Marié des Landelle's two landscapes in Room VII. should be looked at, and M. Le Vilain's "Ilots de Vaux-la-Reine" (XI.), an evening light effect; and M. Maincent's "Un Soir à Port-Marley" (XIII.) is a beautiful bit of evening effect on a river with wooded banks, and is one of the few which impresses one as a beautiful scene, and not merely a cleverly-painted one. M. Massaux's two pictures, "Dans le Prairie; le Matin," and "Dans les Polders; le soir" (V.) are very successful studies of morning and evening effect in a flat landscape. Mr. James Paterson's "L'Hiver sur La Cairn; Écosse" (VI.) which has been exhibited in London, holds its own very well here, and might give hints to some of the French painters as to representing light on a landscape. M. Pelouse paints a large picture on the "Bords de Seine"—dull, gloomy, and colourless to a degree; if nature were really that tone life would not be worth living. M. Peraire again, in "Le

Marais, environs de Corbeil" (IV.), covers the earth with nasty green like the cloth of a billiard-table, and M. Pointelin's large painting of a scene in the Jura country (IV.) is still worse; dull greens and leaden skies; one feels choked for want of air in looking at them. M. Quignon's "Le Moisson" (IV.), is a fine work, with its dark masses of trees sailing above a golden sea of wheat; there is some colour here, at all events. M. Schenck's "Les Survivants de Troupeau" (XIV.), is a good snow-scene. A large picture by M. Tessier, "Marée Montante" (XXII.), a flat shore strewn with boulders, and where a cartload of seaweed is being painfully dragged through heavy sand, the man pushing at the wheel, is remarkable for the sense it gives of an impending danger; there is a stormy sky and the breakers of the rising tide are seen over the boulders; the evident struggle to get along with the cart as fast as possible emphasises this expression, and clenches the powerful effect of the whole.

Generally speaking, the French painters are not successful with the sea; they seem to want the feeling and sympathy for it. M. Lapeyriére's "La Plage à la Teste" (III.) is truthful in colour, but the waves are studio waves,—their forms are not from Nature. M. de Kerdréoret's small painting of "L'Equinoxe" (XIX.), bought by the "Société des Amis des Arts," showing heaps of white water blown against a breakwater in a gale, has at least something of the wildness of the sea; the forms are good, but the stuff of which they are made is not watery enough—at first glance it might be snow and ice. The two best sea-pieces are those by M. Charles Lizé (XII.) "L'Appareillage du Matin" and "Brise de Soir"; in the latter a ship and a steamer are gliding over a smooth evening sea, the latter under full sail; the former (the best work) is a fresh morning sea, with two fishing-boats bending before the breeze and sailing out of the right-hand side of the picture; a great deal of the effect depends on this little bit of composition, putting both the craft at one corner and leaving the rest open sea; the spectators seem conscious of their movement and almost expect them to sail out of the scene in a moment: the craft are well painted too, and the whole thing a complete success.

Of the splendid collection of sculpture, the glory of the Salon exhibition, we must speak separately, for it would be absurd to dismiss it with a few words, and we must devote some observation to the new Salon, a much smaller exhibition though with a good deal of special interest about it.

The "Salon Meissonier" occupies the first floor galleries of the Palais de Beaux-Arts of last year's exhibition, the entrance to the exhibition being by the central hall and grand staircase. The best portion of the exhibition of pictures is to be found in the long galleries running southwards from the central hall at each side, called Galleries II. and IV., and in Gallery III. ranging with the width of the hall on the east side. The gallery running round the central hall is devoted to what works of sculpture there are, which are neither numerous nor for the most part important; the only one perhaps which is particularly worth mention is the plaster model of M. Dalou's seated statue of Lavoisier, a very expressive figure with the head leaning on one hand in attitude of contemplation, and the same sculptor's model of the figure of Victoir Noir intended for his tomb; a bronze figure representing him lying on his back with his hat by his side, as if fallen after the fatal duel which ended his life. In giving in his adherence to the new Salon, M. Dalou does not seem to have put forth much of his power to support it. The central gallery also contains the one work which has any reference to architecture, viz., the cartoons and two models for M. Galland's decoration of the side gallery of the three large saloons of the Hotel de Ville. Two bays of this are given full size. They are divided by the broad transverse ribs of the vault, with flat soffits; between these, on the haunches of the vault, are small paintings in square frames surrounded again by oval-shaped cartouches, the paintings representing the trades of Paris; below there are smaller cartouches containing eminent names in French architecture, "Ballu," "Deperthes," &c. The crown of the vault is occupied by a series of decorative symbols framed within architecturally disposed panels. The whole of the detail is exceedingly refined and has evidently been carefully studied. Two small models project from the wall, giving on a small scale the actual arrangement of the paintings on the surfaces of the vault. This exhibit in itself is a very interesting one. With this exception, architecture or architectural decoration finds no place in this exhibition.

The two ends of Gallery II. are occupied by large works of pictorial decoration. At the upper end, on each side of the door, are M. Lerolle's two paintings, of St. Martin as a soldier dividing his cloak with his sword to give half of it to a pauper, on the other side Christ appearing in a dream to St. Martin and relating to three angels that Martin had covered him with this cloak (according to the text "whosoever doth it unto one of the least of these hath done it unto me"). These are intended for the Church of St. Martin; they are painted in a flat fresco-like style suitable for decoration, and tell their story well. The whole of the opposite end is occupied by a great piece of "Puvisme," a great painting by M. Puvis de Chavannes, in a built-up framework of its own, intended for the staircase of the Museum at Rouen, and entitled "Inter Artes et Naturam." This has not the same merit of telling its story well, in fact it recalls the line from the Anti-Jacobin,—

"Story, God bless you! I have none to tell, sir."

It is a scattered composition of figures in which the groups have little relation to one another. On one side are three artists and an artisan in very modern costume doing nothing in particular; on the left hand are three young women in somewhat more idealised costume, one giving the other a lily to draw from, a third, a very graceful figure, half reclined on the grass with her back to the spectator, also not entering into any action involved in the subject; in the background some workmen are apparently employed in setting up again the fallen blocks of some architectural monument; engaged in a work of "restoration," possibly. The back of the scene is filled by a view of Rouen. Decorative the work is, in regard to its æsthetic and in delicate effect of colour, but it is singularly deficient in meaning and in unity of idea and composition.

After these we come to purely pictorial work. In this department the proportion of good things is very large, and there is no doubt an air of refinement and selectness which does not strike one among the more multifarious contents of the old Salon; there are many very good things, and few bad ones; at least in the two principal galleries. As most of the new school have followed the new Salon, there is of course a good deal of painting with a special and progressist character of its own, which means a certain amount of eccentricity, but it is mostly eccentricity with an artistic purpose. In this connexion it is curious to find such a very mundane painter as M. Carolus Duran acting the part of Saul among the prophets. A whole row of his brilliant portraits of ladies in the height of fashionable costume are spaced equally along the end wall of Gallery II., and however lacking they are in the higher qualities of artistic feeling, they compel admiration for their brilliant execution and for the intimate knowledge, one might say instinct, which they display in the art of suiting the colour and costume to the personality of the sitter. The portrait of the graceful and *spirituelle* "Princesse de ——," in a cream-satin dress with a pink cloak, looking the very flower of aristocratic grace and refinement, is strikingly contrasted with the treatment of the more dignified portrait numbered 183, of an older lady in a plain red dress without a particle of ornament, backed by the ample folds of a black velvet cloak; and as another variety we have "Mdlle. S——" as a study in greys, a young girl in an outdoor costume. Oddly assorted with these is the study entitled "Lelia," the torso of a nude woman seated on crimson velvet with her back to the spectator, the head just turned sufficiently to show the outline of brow and cheek, the flesh splendidly painted. All this is not very high art, certainly, but it has the merit of being superbly successful within its own range, the work of a painter who knows exactly what he wants to do and how to do it.

The Salon Meissonier contains but one work by M. Meissonier, "October 1806," Napoléon and his staff watching the effects of a charge of cavalry in we know not precisely what battle. The figure of Napoléon is as remarkable as in all the painter's other representations of him; he sits on his grey horse looking after the body of galloping horsemen as if his whole intellect were concentrated on the event of the movement, with an expression that haunts one afterwards. The execution of the picture is, as usual, complete in every other respect; but it is the personal interest concentrated in the principal figure that makes the picture: the rather as in this instance the soldiers in action are comparatively distant figures, and the staff officers seem merely ornamental.

In the matter of landscape it should seem that, whether intentionally or not, the new Salon shows a kind of revolt against the cold greens and sunless skies which gave us so much cause of complaint in the old Salon. Here we find ourselves much more in a land of sunshine. M. Girardet's "Verger de la Vallée d'Auge" is one of the most perfect little landscapes we remember, in regard especially to the balance of the artistic relation between painting and nature; it is real but not realistic, nothing is hardly finished but everything is shown—the trees and the grass, the admirably-drawn figure of the woman with her pail, the brown cow making a beautiful bit of colour in the middle of the scene; it is perfect nature, but nature interpreted (not prosaically *copied*) through the medium of pigments. M. Montenard has been painting about the south of France, and floods his works with southern sun; especially in "Les Quais de Toulon" and "Le Vieux Ponton," an old ship's hulk on the water, looking absolutely scorched in the glaring sunlight. M. Aublet too gives us a gay open-air scene in his large picture, "La Fête-Dieu," a company of young ladies gathering roses in a field full of long grass which sparkles in the sun; the women (except a dear little girl who holds a basket for the flowers) are rather mannered and over-dressed, but after the Salon landscapes it is quite a comfort to get a scene in full sunshine. M. Aublet's collection of works here shows a remarkable variety of powers. One of the finest things in the long west gallery is M. Courtens' "Matinée, Automne," a scene in which a calm stream is seen lighted by sunshine struggling through a thick mass of yellow autumn foliage from the over-hanging trees covering in the whole scene; the effect of light and colour is given with wonderful truth and power, though by means of a very broad and bold handling; there is little detail to be made out on a near inspection, but the whole falls into its place and tells splendidly at the proper distance.

The best works are all in the two long galleries east and west, and in the shorter end gallery parallel with the central hall; a number of smaller rooms have been unadvisedly filled with works of little value to add to the numbers of the Exhibition, the worst possible policy in what professes to be an exhibition of select excellence. We can only now just notice in the order of the catalogue a few of the more striking works remaining. M. P. A. Baudouin's "Episode du Siege de Paris" is one of the immense life-size pictures in which scenes of this kind are being perpetuated; apparently it represents a giving-out of stores at some official place, with a crowd of people forming *queue* to wait their turn; it is an impressive work of its class, with much character in the

separate figures. M. Jean Bérand's "Monte Carlo (rien ne va plus)" is, we are sorry to say, the popular attraction of the exhibition, for it is a most hard and commonplace work in style, but a very highly-finished representation of all the details and personages of the gaming-table, and therefore probably interesting, for opposite reasons, to those who have and those who have not taken actual part in the proceedings. M. J. E. Blanche's portraits are among the best in the exhibition, especially that of "Mdlle. J. M. sur son pony." There is a remarkable group of portraits by M. Boldini, in one of which he has represented a well-known Parisian artist, with his wife and daughter, with his mouth open in undisguised laughter; the effect is distinctly *not* happy, but the whole of this group of portraits are vulgar in style, though their cleverness is undeniable. M. J. C. Cazin has several good little works. M. Courtens, by the way, whose autumn picture we noticed just now, sends a small work called "Coup de Vent (temps pluvieux)" which is just as remarkable in its way, and wonderfully true to nature. M. Damoye has a variety of fine works, among which "Les Blés (Bretagne)" and "Dans les Dunes" are the best. M. Emile Friant's "La Lutte" is an exceedingly vigorous picture of a wrestling match between schoolboys who have been bathing; his landscape, "Le Rocher de Monaco" is also a fine thing. M. Gervex exhibits rather a medley of works of different types, the principal one being a portrait-group of French politicians of the day. The works of an American landscape painter, Mr. Harrison, are among the most original and powerful in the galleries, especially the study of the sea at night with a glance of moonlight on rough water. M. Kuehe's "Ave Maria"; M. Lafon's "En plein air," a nude figure seated with her back to the spectator (rather recalling Sir F. Leighton's "Psamathe"); Mdme. Madeleine Lemaire's "Le Sommeil," a very fine painting of a lady asleep with a rich dress with artificial flowers pulled loosely over her; M. Lieberman's "Dans les Dunes," a painting of a dreary waste of sand with a woman tugging at a recalcitrant goat in the foreground; M. Mesdag's "Avant l'Orage"; M. Rixens' "La Toilette," a half-dressed lady before her glass, an admirably-drawn figure—these are all pictures worth looking at. M. Roll makes a good show; among his cleverest works is a portrait of M. Coquelin the younger, in evening dress and evidently in a character; and his "Enfant avec sa Bonne" is an admirable and quite unusual study of child character. It is a pity he exhibited his "Grande Marée," which looks little better than a mass of soapsuds. Mr. Alfred Stevens is a large exhibitor of a great variety of works, among which "Rêverie" and "La Lettre" are the best. M. Thaulow's snow scene, "Un Jour d'Hiver en Norvège," is a marvellous piece of realism, which however it is not so difficult to achieve with snow as with some other kinds of scene—the problem of light and colour is a good deal simplified. M. Tournès' "Femme qui se deshabille" has attracted a great deal of attention; it is a clever but not an interesting or beautiful work, and to our thinking has been much over-rated. Among smaller works are some admirable still-life paintings, "Prunes et Verre de Vin," and "Fromages et Fruits," by M. Zakarian, which are perfect in regard to colour handling and artistic perception.

The new Salon certainly gives one the opportunity of studying a small selection of pictures under different circumstances from the more crowded collection of the old Salon, and if it is kept as a small exhibition of high-class paintings it will be a gain: but it should be kept at the highest possible level in regard to quality rather than quantity. As it is, it would have been a much better exhibition and have preserved its special interest much more truly, if it had been confined to the contents of the three galleries we have named, and even those would have borne weeding.

NOTES.

MR. BALFOUR BROWNE waxed heroic towards the close of his summing-up in the Railway Rates Inquiry, his peroration contrasting strongly with the utterances of some of his clients, who have pleaded their helplessness against the "long purses" of railway companies. He said:—"Should this tribunal recommend the Board of Trade to agree with the railway companies and accept their schedule, then the traders must look elsewhere for help; and he believed that, in the long run, the traders were more powerful than the companies." It is doubtful whether anything will ever "turn up" likely to be of more advantage to the traders than the present inquiry. It has afforded them an unequalled opportunity for explaining their position and requirements,—an opportunity of which many have fully availed themselves. The companies still resist the claim for truck-load rates, being apparently apprehensive that intermediate carriers would spring up, who would take possession of the truck and fill it with small consignments of goods collected from various parties, thus diverting a portion of the profits. Sir Bernhard Samuelson's investigations showed that some of the continental trade is carried on under these conditions, to the advantage of the community. An important concession, announced by Sir Henry James on behalf of the associated companies, was as follows:—"In the case of merchandise in respect of which the service of loading, unloading, covering and uncovering is not performed by the company at any station, the maximum service terminal authorised by the schedule shall be reduced—in Class C, loading 3d. per ton, unloading 3d., covering 1d., uncovering 1d.; and in classes 1 to 5, such an amount as may be agreed upon; or, in case of difference, determined in a summary manner by the Railway Commissioners." Mr. Balfour Browne objected that the amount of rebate was insufficient, and that the words "classes 1 to 5," &c., were too indefinite. He suggested that all traders who did their own loading, unloading, &c., and provided their own station accommodation (like Messrs. Huntley & Palmer), should be allowed a rebate equal to the amount actually charged by the railway company to other traders for doing the work. After all, the important point is that the principle of rebate under such circumstances is now admitted by the railway companies, and Mr. Balfour Browne's more logical suggestion may perhaps be eventually substituted for Sir Henry James's.

THE Strand Improvement Bill was on Monday last again before the Hybrid Committee appointed by the House of Commons to consider it, when Mr. Dickinson, the vice-chairman of the Parliamentary Committee of the London County Council, stated that since he had given his evidence to the effect that no experts other than the Council's own officers had been consulted on the scheme, he had learned that Mr. Vigers, the well-known surveyor, was consulted, and that he advised on the estimates. The Chairman of the Committee (Mr. H. H. Fowler) asked why Mr. Vigers had not been examined before the Committee. Mr. Pope, Q.C., the leading counsel for the promoters, replied that Mr. Vigers had not been called because he expressed disapproval of the scheme of "betterment." The next witness called was Mr. Daniel Watney, who denied that the south frontage of the Strand, or the property in the streets leading therefrom in the direction of the Embankment, would be "bettered" by the improvement. The "betterment" area which was scheduled in the Bill he considered to be very wide of the mark. Mr. Pember, Q.C., in addressing the Committee on behalf of the Strand District Board of Works against the opposition to the "betterment" clauses of the Bill, contended that it was a recognised principle which had hitherto underlain all legislation on public improvements that the incidence of taxation should be determined by the motive of the expenditure, not by its accidental results. There was nothing in the preamble, he said, which pointed to the Bill being promoted for the special benefit of the Strand. On the contrary, they had not for a moment thought that in spending this money the County Council were actuated by a desire to improve the Strand property, their object really being to facilitate the traffic in one of the main thoroughfares of London. Mr. John Dunn, F.R.I.B.A., surveyor to the Strand estate of the Duke of Norfolk, was called, and said that he did not believe that the proposed improvement would "better" the south side of the Strand, nor Arundel, Norfolk, or Surrey streets. It was quite true that the Duke of Norfolk's Strand property had doubled in rateable value in about ten years, but that was to be attributed partly to the building and opening of the New Law Courts, and more largely to the fact that a large amount of property on the estate had been rebuilt. Mr. Tewson, another professional witness, confirmed the evidence previously given by Mr. Watney. Both these witnesses expressed the opinion that the first plan proposed by the Council, for taking the block north of Holywell-street for recoupment, was a better scheme than the alternative plan, which would leave the north side of Holywell-street the north side of the widened thoroughfare. If the latter plan were resolved upon, the Strand would be 120 ft. wide at this part; if the first plan were followed, it would be only 100 ft.—quite ample, we think. Two or three tradesmen on the south side of the Strand were called to give their opinion as to the possible effect of the proposed improvement on their businesses. One of these witnesses was Mr. Cole, the hatter, who said that he thought his business would suffer rather than gain if the improvement were carried out. He thought that a narrow street with congested traffic was better for his business than a wide street, because people who were in cabs and carriages had an opportunity given them by occasional blockages of the traffic to observe the shops and their contents. Mr. Cole has evidently quite changed his views since he attended the meeting of inhabitants held at King's College in December, 1888, to consider the question of the restoration or removal of the Church of St. Mary-le-Strand (see *Builder* for Dec. 8, 1888, p. 407). *Then*, Mr. Cole was a leader in the movement for the removal of the church, on the ground that it was an obstruction to the traffic! The Committee adjourned until Monday, June 9.

AS will be seen by the long report which we publish this week, the Architectural Association at its last meeting did not come to any decision as to the report of the special committee appointed to inquire into the educational methods of the Association, and the discussion has been adjourned to the 30th inst. While it is well to be deliberate in coming to a decision on recommendations which must largely affect the future of the Association, it seems to us that one or two of the speakers quite failed to realise the fact that the report must necessarily be considered as a whole. We quite agree with Mr. Cole Adams and others speakers that it would not be desirable to altogether eliminate "voluntary" workers from the Association. Some of the speakers, we are pleased to see, boldly advocated the establishment of day classes, for, as we said in our leading article on the subject last week, the Committee's suggestion on the question was rather half-hearted. Mr. Gotch, in his remarks, made the same suggestion as that which we made in our article as to the payment of the teachers or lecturers, viz., that their payment should be partially by salary and partially by capitation fees. Before the serious engagement of the evening commenced, there was a preliminary skirmish on the question whether it was advisable or not to publish the numbers of votes recorded for the candidates nominated to serve on the

Committee. We cannot see what objection there can be to stating the numbers, and therefore, as they were publicly announced, in accordance with the wish of the majority of members present, we include them in our report of the proceedings.

THE great gift of a quarter of a million pounds,* which Sir Edward Guinness last year proposed to bestow on trustees for the purpose of erecting in London and Dublin healthy houses for the working classes, requires, it seems, a special Act of Parliament to permit its acceptance. The law of mortmain, passed six centuries ago to prevent the accumulation of land in the hands of ecclesiastical bodies, now stops the building of artisans' dwellings. By the same law, Lord Cadogan's offer of land in Chelsea cannot be accepted by the Guinness trustees for the purposes of their trust. That such munificence may not go a-begging longer than need be, a Bill entitled "The Working-Class Houses Bill," has just been introduced into the House of Commons by Mr. Lees Knowles; it is backed by Conservatives, Liberals, and an Irish Home Ruler, and cannot, therefore, by any means be considered a party measure. The promoters of the Bill propose to exempt from the laws of mortmain any assurance (by deed or will) of land, or of personal estate to be laid out in land, for the purpose of providing dwellings for the working classes in populous places, provided that the quantity of land assured by will does not exceed five acres, and that the deed or will is, within six months of execution or of probate, enrolled in the books of the Charity Commissioners (for England and Wales), or (for Ireland) in the office at Dublin for registering deeds. A second clause extends the operation of the Act to assurances by deed made within twelve months before its passing by a person alive at that passing, thus permitting the acceptance by the Guinness trustees of the gifts of Sir Edward Guinness and Lord Cadogan. The Bill was read a first time on Thursday last, and we trust that it will soon become law, although we must confess that we have not overmuch sympathy with this continued tinkering of old statutes.

IN the case of the Commissioners of Works *v.* Banting, which was tried on Monday last, Mr. Justice Day sat with an assessor, Mr. Penfold, the architect. The case itself was of no public interest, relating only to the title to a wall at Kensington, but various technical details had to be gone into, and the Court itself was littered with plans. We note the case because, so far as we are aware, it is the first in which an architect has sat as assessor with a Judge of the High Court. The practice is very desirable, and the precedent ought to be followed in all cases in which technical questions as to buildings are involved. The Institute of Architects and the Surveyors' Institute might jointly appoint a rota of assessors from whom assessors might, when required, be selected. These bodies might well put themselves in communication with the Lord Chancellor on this point, and express their willingness to make such a selection. The Board of Trade has a regular list of nautical assessors for the purposes of shipping inquiries, and the Trinity House has also a rota of Elder Brethren for the sittings of the Admiralty Court. The Lord Chancellor can scarcely be expected to take the initiative on this point, and we therefore strongly urge on the bodies we have named that they should follow up the precedent set in this case. If assessors were employed in building cases, it would give confidence to suitors, and further the ends of justice. Lawyers, however able, cannot master technical details in a moment, but a skilled assessor can often make a technical point clear in a few moments, and thus prevent the loss of public time and judicial temper.

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* See the *Builder* for November 23, 1889.

IN reference to the question of the proposed monument to the German Emperor William I., we are able to state on good authority that the Imperial "Bundesrath" will be asked by General Caprivi to come to the following decisions:—

1. That a monument to the deceased Emperor William I. be erected on the newly-opened-up extension of the so-called "Schlossfreiheit."
2. That the monument take the form of an equestrian statue.
3. That the Chancellor be empowered to organise a limited competition for the aforesaid monument.

It being a well-known fact that this idea has originated with the young Emperor, and that the latter is said to have notified to the members of his suite that he would be in favour of no other monument but one in the above form (to be placed in front of his palace), we have good reason to believe that the decision will be arrived at, in spite of public opinion throughout the country being absolutely against this mode of working out so important a project. It may be worth note that the new extension of the "Schlossfreiheit," on which the monument is apparently to find place, is being laid open by the aid of a lottery organised by a committee of financiers.

A NEW monument is to be erected at Dresden in memory of the famous German architect, Gottfried Semper, on account of the great services he rendered to the architecture of the present century. It will be a life-size statue of the architect, to be erected by the combined architectural and engineering societies of the Empire.

THE completion of the "Hofburg" at Vienna is being energetically taken in hand again, it having been decided to finish and cover in, with a cupola of some 25 mètres diameter and 51 mètres height, that part of the block situated towards the "Batthyanystiege," at present serving as entrance to the inner "Burgplatz," and which has for many a year shown a most ruinous appearance. The architect, Reg.-Rath Kirschner, who intends keeping the new erection in the same style and on the same lines as the riding-school close by, has planned a large portico entrance to the building, for which four pieces of sculpture of considerable dimensions, referring to the Hercules legends, are to be prepared. The opening ceremony cannot, however, be expected to take place for some time.

DR. TRISTRAM, Q.C., Chancellor of the Diocese, sitting in the Consistory Court of London, has granted a faculty for building over a reputedly "disused burial-ground," under the peculiar circumstances of the case. It appears that the open space which lies next northwards of St. Sepulchre, Holborn, and being, in fact, portion of the old parish churchyard, has, in the Chancellor's opinion, ceased to be a disused burial-ground within the meaning of section 3 of the Disused Burial Grounds Act, 1884. And this because the ground had been covered partly with flagstones, and partly—upon a higher level—with concrete (as a playground), with the parochial schools, and with an adjoining large coal-house. This coal-house it was sought to convert, at a cost of 500*l.*, into an extension of the infants' school. In view of these conditions, the Court held that the churchyard could not be considered as one of the disused burial-grounds, to which alone, as such, the Act in question applies. We may add that the Vicar's and the churchwardens' petition for the faculty was not opposed; and that the present schools, removed some years since from Ball-court, Giltspur-street, stand upon a raised bedding of concrete laid over the graveyard.

BY direction of the Charity Commissioners, the Governors of Robert Aske's Hospital have agreed to grant an eighty-one years' lease of the sites of Haberdashers' House and two adjoining messuages, being Nos. 59 and 75, Buttesland-street, Hoxton. The lessee is to pay rent of 175*l.* for the first year, and then 350*l.* per annum; he undertakes to erect on this property, which covers about 23,000 ft. superficial, some artisans' dwellings, at a minimum outlay of 20,000*l.* The hospital was built in 1691-2 by Dr. Robert Hooke, the mathematician, upon the endowment of Aske, citizen and haberdasher, who demised a sum of 30,000*l.* in trust to the Haberdashers "ad viginti senum [to be freemen] alimenta et totidem puerorum educationem;" according to an inscription under the former central pediment. Haberdashers' House—now No. 55, Pitfield-street, *olim* Haberdashers'-walk—forms the northern wing, and is the only remaining portion, of the original fabric, which was rebuilt for almshouses in 1824-6, after the designs of D. R. Roper, architect. Separated from the present school by Buttesland-street, it is a conspicuous building, square on plan, of red brick, three stories in height, having a mansard roof, and high angle-pedimented dormers on the attic floor. Hooke's design included the classical piazza, with an ambulatory 340 ft. long, that lay between the two wings, as described by Hatton, and of which the company possess a model. The hall of this company, at one time the Hatters and Milaners, was rebuilt by Wren after the Great Fire. In a return supplied to the Commissioners a few years ago the gross income of this particular charity is set down at nearly 8,500*l.*, derived from its estates in Hoxton and Kent.

DR. WALDSTEIN devoted the first part of his second lecture on "Recent Excavations in Greece," delivered at the Royal Institution on Saturday last, to an enumeration of the circumstances which led him and other archæologists to the conclusion that Hissarlik was the site of the Homeric Troy. The topographical and physical conditions of the spot agreed with those described in the Homeric writings, and the excavations of Dr. Schliemann, coupled with the geological, zoological, and palæontological examination of the site made by Virchow, had, in the lecturer's opinion, placed the matter beyond doubt. It was true that Strabo, in the thirteenth book of his "Geography," quoted from a certain Demetrius, a native of Skepsis, who was a grammarian of the Pergamene school, a statement to the effect that the site was further inland; but there was reason to believe that Demetrius, as a native of a neighbouring and rival city, was a prejudiced witness, and certainly his unsupported testimony did not stand the test of modern criticism and research. The lecturer next described the excavations carried on under the auspices of the German Government at Olympia. These excavations, he said, constituted one of the most important works of scientific investigation which had ever been undertaken, and it redounded to the everlasting credit of the German nation that it should have so unselfishly undertaken so great and expensive a work purely in the interests of research, for they were precluded from carrying away anything they found. One of the most important finds during these excavations was a marble statue of Hermes, which was undoubtedly the work of Praxiteles. Two photographs of this statue were thrown on the screen by means of the electric lantern, and the lecturer pointed to the successful way in which the sculptor had treated the hair of the head of the statue, which was executed in what was at that time a new material, for it was not until the fourth century B.C. that marble was regarded as a sufficiently noble material for an important statue, ivory and metals having been previously used for the most important works of sculpture. Dr. Waldstein's third and concluding lecture will be given this Saturday, the 24th.

AT Lübeck, under the able management of the Architectural Department of its Board of Works, an entire restoration of the fine old Town-hall is being gone through, piece by piece, without disturbing the business

carried on in the offices situated therein. The renovation, cleaning, and repairing of the fine old German Renaissance woodwork in this building is pretty well finished, and the excellence and fine detail of this old work can now be easily studied; the two halls situated on the ground-floor, and belonging to the "exchange," have been completely redecorated, and show some interesting Romanesque decoration; whilst a new main staircase in glazed brick (on one of the walls of which a mosaic in memory of the late Emperor William I. will perhaps be placed) is well worthy of note. In the same town a new Museum, showing elevations in brick in the style so natural to the place, is being erected, at a cost of about 20,000*l.*, and several new buildings, among which is an exceedingly well-proportioned post-office completed but a short time ago, are springing up in the picturesque old streets. In regard to the engineering work, the new town waterworks are being extended, and a central electric station, with an extensive net of underground wires, is now in use, this latter acquisition to the town having been carried out by the authorities so as to prevent private competition against the corporation gasworks.

AT Hamburg the extensive new harbour works, with their multitude of warehouses, offices, minor buildings, and, last not least, bridges, may now be considered complete, and it will certainly be worth the while of any architect to visit this vast collection of structures, the elevations of which show throughout an adherence to moulded brickwork, which has always been a favourite method of building in this part of Europe. Among the buildings in the town completed during the last few years, the new Law Courts, showing façades in the German Renaissance style, and the new Post-Office, an imposing block in the modern free style, are specially worth notice; whilst of those buildings now in course of erection, the new "Rathhaus," which is unfortunately being placed on a too-crowded site in close proximity to the lately-enlarged "Exchange," may be said to be progressing as quickly as could be expected, and the new "Stadthaus" will soon be roofed in. In the suburbs villas of a more or less English type are being built in great numbers, and on the whole these private residences may be said to show some interesting elevations, besides well-finished interior work.

AT the Hall of the Armourers' and Braziers' Company in Coleman-street, an exhibition has been opened of various descriptions of metal-work, chiefly brass or combinations with brass. The exhibition occupies five rooms, but only one is devoted to work of recent date, for which prizes are given, the others being chiefly loan exhibits from South Kensington and firms of metal-workers. Upwards of one hundred and forty articles are exhibited, and of these the repoussé work in copper and brass is of the most interest and decorative value. Some especially fine plaques in copper and brass have been sent by the Guild and School of Handicraft, designed by Mr. Pearson (55), of similar character to those sent to the Arts and Crafts Exhibition last year, one of which we illustrated (*Builder*, November 2, 1889). Mr. Ashbee is represented by two coal vases in copper (53 and 31), a log box in copper and wood (35), and fireplace in the same materials. Both the latter are ornamented with a series of oblong copper panels with foliage. The Guild also sends a picture-frame in repoussé, designed by Mr. Holman Hunt for his picture of the May-morning Ceremony at Magdalen (34),—a large circular plaque with moulded edge, and a central oblong panel. From this rays extend to the border, and on ribbons are the words—

"And Fyry Phœbus ryseth up so brighte
That all the orient laugheth at the sight."

There is also a copper bowl, of simple outline, designed by Mr. Pearson, and ornamented with flying dragons and fish. A fender in copper and iron (54) is bold, but a trifle clumsy. It consists of a series of copper panels in an iron framework, with copper knobs at the angles. A candelabra in iron and copper (57) is also noteworthy. The work submitted by the Keswick School of Industrial Arts varies in quality. The brass and copper dishes (110-113) are very good, both in design and execution, but hardly the same can be said of the altar cross and alms-dish (23 and 24) which, although carefully wrought, are lacking in originality. Near the centre of the room is a hall lantern, exhibited by Messrs. Strode & Co., excellent in design, and awarded a special prize as being the best work in the Exhibition (67). We should, however, like to have seen a greater appearance of strength at the top. The foliage is dainty, but it lacks an air of stability. Among the smaller objects the following are most worthy of notice:—(26) a lunette panel in repoussé, (41) two brass finger-plates in brass, with delicate foliage and figures, (48) a round muffin-stool in copper, (69) a picture-frame in etched copper with an outer and inner border of wood, (70) a lock-plate in copper and brass, with Cupids, (102a) a door-knocker and knob in bronze, and (120) a tray in copper and tin, with fighting birds—we suppose swans. At the end of the room is a tray with a low relief representation of fog, a figure poised in the air with flowing drapery, and the words, "Hover thro' the fog and filthy air." Some of the students' work in Room II. is good, but most of it lacks spirit. An exception to this, however, is a girandole with double sconces in brass, copper, and iron (168); a very fine piece of workmanship which has been awarded a first prize. The other rooms, as has been before mentioned, are occupied by the loan collection lent by South Kensington, and also some modern examples, many of which, we think, hardly add to the exhibition. We hope to give some sketches of the exhibits shortly.

ARCHITECTURE AT THE ROYAL ACADEMY.—IV.

1,779. "Trinity Hall, Cambridge: new buildings:" Messrs. Grayson & Ould. A pen drawing of a block of buildings in Domestic Gothic style, with corbelled-out oriels under each gable. The rather high solid parapet over the upper oriel windows gives them rather a heavy effect. The double clusters of chimney-stacks with decorative surface tracery have a rich effect.

1,783. "Study for a portion of a Reredos at Dursley": Mr. H. J. Westlake. A monochrome drawing with a kneeling figure of a saint with very broad and massed treatment of the drapery, in a style suggesting a reminiscence of Albert Dürer; two other draped figures behind apparently standing, though their heads are hardly higher than that of the kneeling figure, perhaps for decorative reasons, like the arrangement of the heights of the standing and riding figures in the Parthenon frieze. The drawing is hung too high for detail to be much seen.

1,784. "Lichfield Cathedral; western façade": Mr. Arnold Mitchell. This very charming drawing, of which a reproduction appeared in the *Builder* for Jan. 5, 1889, is pretty nearly an elevation treated with some of the effect of a perspective view; the lines which are at an oblique angle, as on the sides of the spires, are inclined so as to give a perspective effect, but otherwise both the towers are seen in elevation simply. The centre spire, which is indicated in outline at the back, appears also to conform to some extent to the requirements of perspective, since it is represented as lower than the front towers. The building itself is in Mr. Mitchell's now well-known black-and-white style, but a background of trees and houses is slightly touched in colour on each side, and a sky is delicately indicated in colour. This method of treatment is of course quite illogical, but it has the merit of showing the architectural detail accurately while giving something of a pictorial look to the drawing and removing it from the category of mere elevations; the same kind of practice, as we observed when commenting on the Salon architecture, is not unfrequently adopted by French architectural draughtsmen, and it fulfils its purpose, and is carried out in this case with so much delicacy and finish that we do not understand why the drawing was not given a place nearer the eye, which it certainly merited.

1,786. "Designs from Flowers of Paradise": Mr. Reginald Hallward. Two bits of decorative conventional floral design drawn with the brush in red, one on a light red the other on a white ground. The latter, in which the flowers form a heart-shaped cluster bounded by thin sprays of leaves, is a very good and effective piece of decorative work of its kind, drawn with a true feeling for the conventional treatment of foliage.

1,787 "Central Library Chelsea": Mr. J. M. Brydon. A very firm and well-executed pen drawing of a square mass of building with a hipped roof and cantilever cornice carried round, the window dressings treated in a style in keeping with the neighbourhood, rusticated with separated quoins and voussoirs cutting through the architrave mouldings; there is a semicircular porch with an Ionic order which is better connected with the building than is sometimes the case with features of this kind, though still looking a little as if it might have been added afterwards. This is what may be called a perfectly common-sense building, and there is little fault to find with it, taken for what it professes to be, but we not know that such a building adds very much to the architectural happiness of the neighbourhood.

1,789. "Armagh Cathedral": Messrs. Carpenter & Ingelow. A solid-looking pen drawing of a solid-looking church interior, with massive-looking tower arches with plain roll mouldings on the angles of the successive orders of arches, and corresponding plain chamfered piers below. The choir furniture, stalls, &c., which is carefully shown in the drawing, though rich in effect, partakes of the solid character of the whole interior.

1,790. "Broxwood Court, Herefordshire: additions": Mr. Leonard Stokes. There is nothing to show what are the additions,—no plan, and no distinction of them, of course, in the pen line perspective drawing, and all one can say is that as it now stands it is a curious and rather picturesque-looking old-fashioned style of house; but this is certainly not the way to illustrate architectural work. From our knowledge of Mr. Stokes's work we have little doubt that whatever additions he made were an improvement to the house; but wherein they consist and what is their merit it is impossible to conjecture from the drawing. Something more is surely required for the Architectural Room at the Royal Academy than merely to send a view of a house which has been added to, just a picture conveying no information at all.

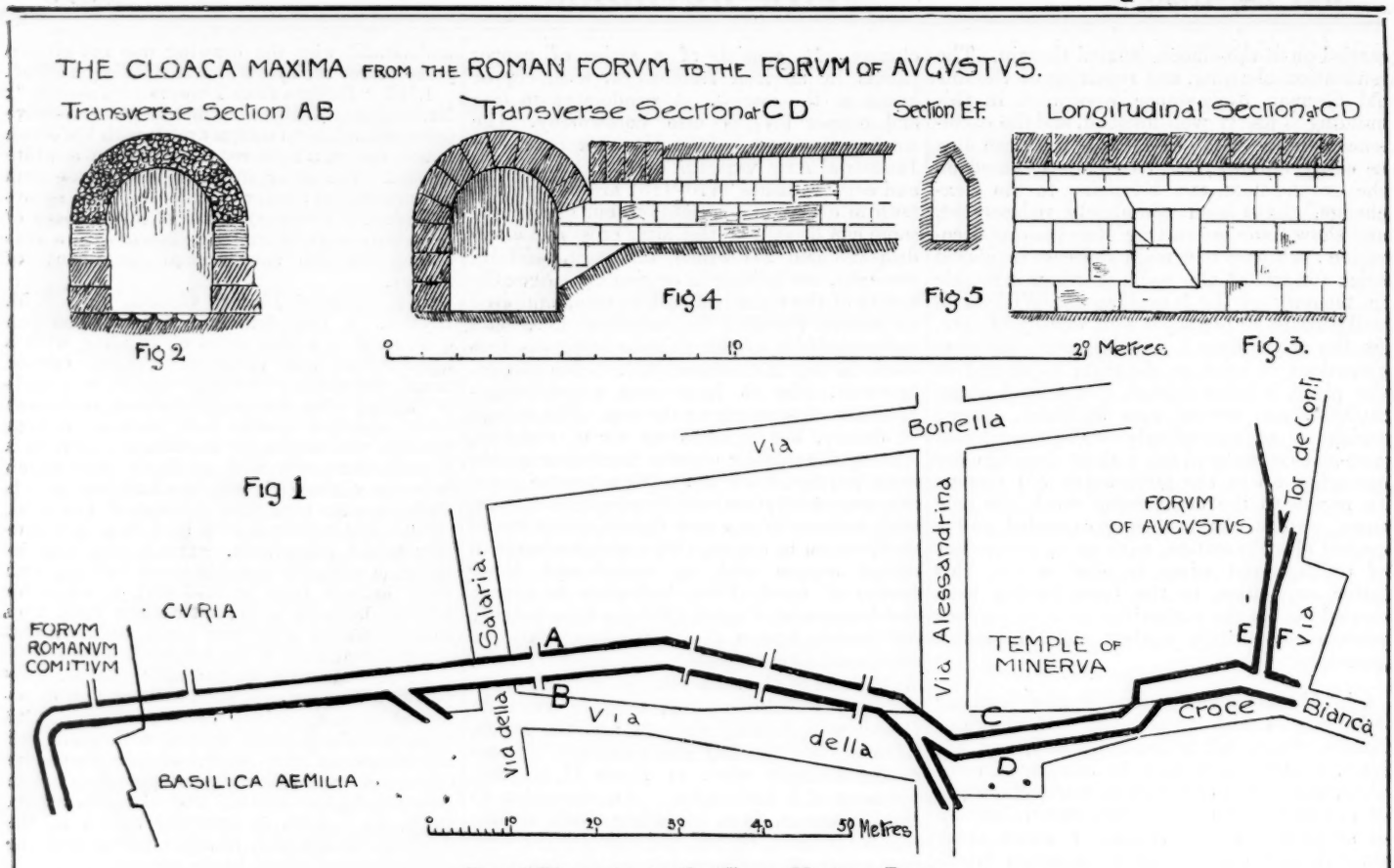
1,795. "Piazza dei Signori, Verona": Mr. A. C. Blomfield. A small and slight but delicately-executed pen sketch.

1,799. "Casket in cloisonné enamel": Mr. John J. Shaw. A rich and pretty piece of work; the top and side elevation are shown. The side and the outer part of the lid are divided into sections by bands of a pale green enamel between cloison lines, and dotted with gold spots along the centre; this band assumes a kind of Moorish arch shape with foliations; the spaces between contain very daintily-designed sprays of flowers and leaves in two or three colours on a dark blue ground; the edge of the lid is decorated with an undulating spray of a similar character. The floral design employed is rather of a Persian type. The feet of the casket are well designed, and the whole is a very artistic design shown in a very well executed drawing.

1801. "A Norman doorway, Glastonbury Abbey": Mr. A. B. Bamford. An apparently very well and carefully painted pen drawing of an interesting piece of ancient architecture; we do not see why it should have been pushed so high up to make room for No. 1800, which has the appearance of being a stray leaf out of a sketch book.

1802. "Seascale Church, Cumberland": Mr. C. J. Ferguson. We presume this little building is a country church in a mountain district; if so, its simple and solid character, with the small square-headed mullioned windows at the sides, seems exceedingly well adapted to the sentiment of a situation of that kind.

1803. "The Hall, Shiplake Court"; Messrs. Ernest George & Peto. The style of drawing in which the works of these architects are usually shown here is far better suited to buildings which are more or less Gothic in feeling than to a Renaissance interior such as No. 1734, before referred to. There is little ornament to draw in this interior, which shows a long



Recent Discoveries in the Cloaca Maxima, Rome.

lofty hall or gallery with the walls wainscotted to a considerable height with plain square-panelled wainscot, large mullioned windows with segmental arched heads and deep internal reveals, and a rather ponderous open-timbered collar-beam roof over, with curved braces to the collar. At the further end of the hall is the orthodox traditional screen. The whole is to our taste somewhat too ostentatiously plain and solid to be in keeping with the taste and requirements of modern life; which is to say that were we to build a house with a big hall for our own use we should prefer to give it a nineteenth century rather than a Mediæval air; but tastes differ, and as there are those who like a rather bare-looking open-timbered hall (against the latter element we have nothing to say) and an air of Mediævalism about their house, it is well there should be architects who can do the thing as well as this is done.

1,804. "St. Saviour's Southwark; New Nave": Sir Arthur W. Blomfield. This is a very carefully-drawn interior in plain pencil outline, with just the joints of the stonework filled in by way of giving a little surface to it. It is a severe and pure Early English treatment in the most conscientiously-correct style, and impresses one in fact as being a view of an ancient cathedral rather than a design for a new one, and this perhaps is the kind of commendation the architect would most desire. At the further end the wall is shown solid, with the exception of a series of lancet windows in the gable, and decorated with a series of niches giving a kind of screen effect. The tomb shown at the end is, we presume, an existing one which is to be preserved *in situ*. Slight as the drawing appears at first sight, it is a very careful piece of line drawing in regard to every detail of perspective.

1805. "Reredos in St. Mary's Church, Aberavon": Messrs. Kempson & Fowler. A coloured elevation drawing showing a wall-arcade of Early English style at each side, with the reredos raised in the centre, of rather richer work of nearly the same assumed date in detail, except that there is an open cusping to the arches over the five niches above the altar; these are filled with statues of Christ and the Evangelists. If archæological correctness is intended, the battlemented finish to the reredos and the arcade seems a little out of keeping with the rest, the general appearance of which is architecturally satisfactory, though there is nothing out of the beaten track of modern Gothic reredoses.

1809. "Memorial Reredos in Harrow Church": Mr. R. Norman Shaw. This is a very original work. It shows a large panel with a gold ground with a conventional floral pattern slightly indicated upon the surface, in the centre of which is a flat painting, in a decorative style, of Christ on the Cross, on one side the Virgin and on the other a figure of an Apostle; the robes of these figures form the only strong colour in the scheme. At the side of the panel, which has a moulded base, is a strip of carved work of foliage; above the panel an open-work border of foliage design. The drawing of this portion is somewhat slight and hurried, and probably does not do justice to the detail; the figures are carefully executed.

1822. "The Savelli Tomb in Ara Cœli, Rome," by Mr. J. T. Perry, is apparently a good little drawing, but cannot be well seen.

1813. "Interior of Halifax Cathedral Nova Scotia": Mr. Arthur E. Street. A large coloured drawing of an interior in the Early English style, with no triforium and a large clearstory; the bold shafts of the piers below the caps are of massive blocks of marble, which has a striking and rich effect in the drawing. The roof is ceiled with panel work, with wooden moulded tie rods; the chancel is shown as vaulted. The drawing is executed in a free and effective style, and there is a largeness and dignity of effect about the interior.

NEW DISCOVERIES AT THE CLOACA MAXIMA IN ROME.

I HAVE already described (see the *Builder*, 1889, March 30, page 235) the excavations made by the Municipality of Rome last year in the southern portion of the area of the Forum of Augustus. I mentioned that under the pontificate of Pius V., in 1570, an excavation was made in this area of the forum, in order to drain the waters that filtered through the soil, and that which descended from the Quirinal and Exquiline hills.

Recently, in order to drain the stagnant pools in the same spot, the engineer, Signor Narducci (author of an interesting work on the ancient drains of Rome), has cleansed the famous drain, Cloaca Maxima, built by Tarquinius Superbus in the year 138 of Rome,—530 years B.C.,—and which runs very near the Forum of Augustus.

The part of the Cloaca drained by Signor Narducci, 91 mètres in length, is between the eastern side of the Roman Forum and the Forum of Augustus (see plan, fig. I). The results have been very satisfactory. The construction of this part of the Cloaca appears to be original only in the lower part of the walls, formed of large peperino blocks (1·20 by 4 mètres). The upper part of the walls, constructed of bricks, was probably added by Agrippa when he restored the Cloaca, and built some additional branches to carry off the waters from his thermæ, near the Pantheon.

The bed of the Cloaca Maxima is paved with polygonal blocks of silex; the vault, as far as the Temple of Minerva, is formed with chips of silex (see fig. II., section A B) as a concrete, and from the temple to the Forum of Augustus with blocks of pietra gabina.

In the space of the Cloaca, between the two forums, seven mouths of secondary drains have been discovered (see plan), of the Imperial time. Near the Minerva Temple, a large and ancient drain—perhaps the drain which in the Republican period ran in the valley of the Carinæ—reaches the Cloaca Maxima (see plan C D and figs. III., IV.). A drain of the Imperial time, built of bricks, and covered with inclined tiles, which runs under the Forum of Augustus, collected the drainage of the area of that forum (see plan E F, fig. V.). L. B.

GERMAN TECHNICAL MUSEUMS.

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE eleventh ordinary meeting of the present session of this Institute was held on Monday evening last, Mr. Alfred Waterhouse, R.A. (President), in the chair.

Mr. Frank Granger, M.A. (holder of the Godwin Bursary, 1889), read a paper on "German Technical Museums," of which the following is an abstract:—

The author considered that this class of buildings deserved the careful attention of architects, now that so much interest was being taken in technical education. The industrial art and trade museums of Germany had been suggested in great part by South Kensington Museum, but close inspection revealed essential differences. The German practice was frequently to locate industrial art museums in school buildings, while they were regarded from the student's point of view, not that of the collector of *curios*. It was advisable to group objects of one kind together, so that the characteristic methods of a group of artists, a district, or a period could be seen in combination at a glance; the division of rooms by partitions and screens, as in Berlin and Hamburg, greatly facilitated this. In planning a trade museum it would be appropriate, on scientific as well as on practical grounds, to group together (1) the materials employed in the industries of construction; (2) the materials employed in the textile and allied industries.

Having dealt in some detail with the objects to be exhibited, Mr. Granger referred in detail to the question of planning. All the buildings visited by him were characterised by great simplicity of plan. The rooms were square or oblong, and arranged along corridors, and generally speaking there was an absence of *tours de force* in the planning. In some of the larger buildings, the corridors overlooked interior courts. The rooms in which textile objects were exhibited should not have the sun upon them; and as but a small proportion of an ordinarily large collection could be exhibited at one time, accommodation should be provided for storage in an easily accessible manner. A library and reading-room should be provided in connexion with each museum, and it should not be necessary to pass through the museum to reach the library, near which lavatories should be provided. The majority of the objects in a museum required glass cases, and the museum authorities in Germany preferred wood to iron for the material to be employed. Details of cases were given very fully by the author, who then turned to trade schools, and trade continuation schools. The latter were interesting because they indicated one way in which the new Technical Instruction Act might be applied.

Mr. Granger then gave extracts from his detailed reports on particular museums, commencing with the Museum at Hamburg, erected from the designs of Herr Zimmermann at a cost of 120,000*l*. It formed a closed quadrilateral with two interior courts, which were separated by a central block. The chief elevation looked east; the greatest length was 343 ft., and the greatest width 247 ft. The Industrial Art Museum, Berlin, was from the designs of Gropius and Schmieden; and was constructed with stone basement and brick superstructure, with tile and terra-cotta bands. The library was on the ground-floor to the right of the entrance. The Dresden Museum of Industrial Art was in the same building as the school; and, as at Hamburg, the museum occupied the ground-floor and the school the upper stories. The Leipzig and Hanover Art Museums and the Hanover Trade Museum having been referred to, the author drew attention to the Trade Museum at Chemnitz as the best example of its class he had seen. It occupied the second story of the building of the local "Handwerkerverein," the floor below being devoted to their library; and consisted of four rooms opening into one corridor, while the further corridor led to a fifth room and a small library. The Mining, the Agricultural, and the Hygienic Museums, Berlin, were next dealt with. The last consisted of rooms ranged round a central open courtyard. The ground-floor was devoted to models of workmen's dwellings; systems of heating, ventilation, drainage, &c. Mr. Granger having described the Mineralogical Museum of the Charlottenburg Technical High School, proceeded to deal with technical high schools, that of Charlottenburg being first mentioned. It was housed in a fine new building, the main block being 600 ft. long by 170 ft. deep from front to front, with two large projecting wings. It had five interior courts; the basement of the exterior was faced with red sandstone, while the upper stories were in yellow sandstone with white sandstone dressings. The principal staircases were of red granite, unpolished, with the exception of narrow strips at the side. In the grounds were a chemical laboratory, a technical testing institution, and an engine-house. Further details were given by the author, who next referred to the Dresden Polytechnicum, which covered an area of 4,200 square mètres. The technological, engineering, architectural, telegraphic, and electro-technical collections there were all arranged with a view to their use in instruction. Many of the doors were provided with glazed slits for thermometers, so that the attendant could regulate the temperature of the rooms without disturbing the classes. The Hanover Technical High School was also described.

Mr. Granger then mentioned several miscellaneous matters which he had noted during his tour, among others the paving and lighting of the Berlin streets. The scaffolding of the new buildings were usually constructed of squared timber, and carried up to the top soon after operations were commenced. The provision for the safety of workmen in this particular was vigorously demanded, that in the form of contract issued by the Ministry of Public Works ran thus:—"The contractor bears the sole responsibility for the soundness and strength of the scaffoldings. On the order of the superintending architect he is bound to complete or to strengthen the same immediately and at his own expense." The bricks used for the interior walling of the new shops and residential blocks were ordinarily the local yellow. Some of the fronts were being faced with brick; the majority, however, were still faced with stucco in the old fashion, the brickwork being carefully adjusted to the stucco detail. At the Academy of Art, Leipzig, the ventilation and heating were kept independent; and the author described, with the aid of diagrams, the system employed, as well as the materials of the building generally. The roof was entirely of wood; the trusses at distances of about 12 ft. merely coupling the roof together, and not carrying the rafters. These were all 7 in. by 5½ in., and about 2 ft. 6 in. apart, and were covered with 1½ in. by 9 in. boards. The lightning conductors were secured to the roof by means of iron tiles or slates, which matched and bonded with the rest. The slates were secured by hooks at the bottom; no leverage was allowed to the wind, and even in exposed situations such roofs had stood for thirty years without suffering much damage. As an instance of German professional practice, Mr. Grainger stated that in the case of the University Library and of the Academy of Art at Leipzig, the buildings were not being executed under the superintendence of their designers, but the library under another architect, the Academy under the Municipal Building Inspector. Architects, also, were often master builders, and carried out the designs of other architects.

The paper, we may add, was not read *in extenso*, although it will be so published in the Proceedings of the Institute.

Mr. E. C. Robins, F.S.A., opened the discussion, and said that he had listened with great interest to Mr. Granger's paper. The great want felt in connexion with technical institutions in this country was that there were no such museums attached to them as were to be found in Germany. As he listened to the paper, he could not help thinking that it would be a very good thing if some of the holders of the Godwin Bursary were to go and see what had been done in this country.* Because, since his (the speaker's) visit to those foreign institutions, a great change had taken place in the buildings erected here, while some of the last buildings erected in Germany had profited by the English examples. He had received letters from professors in Germany who stated that if they had received particulars of the buildings erected here they would have profited by what had been done in England. It could not fail, therefore, to be interesting to know what had been going on in England in this direction. It was to be regretted that so very few papers dealt with buildings which had been erected here, such as those designed by Mr. Waterhouse, where the details of construction were very much in advance of those of some foreign museums and buildings of that class. There could be no doubt that it was of great benefit to bring before the public the fact that there were existing in Germany museums of a remarkable character, illustrating every branch of technical education, so that the professors had no difficulty in finding specimens to explain their lectures. In the large building erected by Mr. Waterhouse for the technical Institute at South Kensington, there was, up to the present time, no museum, for, though Mr. Waterhouse had provided the room for it, there was as yet nothing in it. That was the sort of thing to be found in all recent buildings of this nature in England, viz., that the museum was the last thing to be fitted up. He was therefore glad that attention was being drawn to the fact that we were standing at a disadvantage as compared with the Germans because of the want of corresponding museums. Thus in Berlin, Dresden, Nuremberg, Munich, and elsewhere the education was carried on much further than it was here. In Germany the objects designed and executed by the students were to be found in the museum itself, and at some of these institutions there was an annual sale of the products of the students' labour. The influence of the museum was very great, not only in the interest which it had in itself, but by developing progress from generation to generation. It was valuable because it enabled the present generation to profit by a knowledge of past methods of work, and so led to emulation. From what he had seen of the German museums, they were most liberally fitted up, and the collections of drawings were simply charming. At Owens College recently he inspected some models of all kinds of buildings, which had been purchased in Germany. These were of the most complete description; they could be taken to pieces, and illustrated manufactories of all sorts to their slightest detail. He had pleasure in proposing a vote of thanks to Mr. Granger for his excellent paper, which he hoped might make an impression on the public generally, by showing that we were still far behind our neighbours in such aids to the education of the people.

Mr. T. M. Rickman, F.S.A., seconded the vote of thanks. He was pleased to find that Mr. Granger had studied at the museums the things which they contained. So many architects were in the habit of looking at the building as being the all-important thing, and of considering that the things which were in it were of secondary importance. Such museums as he had seen abroad contrasted very favourably with many of those in this country. Mr. Granger had given them a description of what was to be seen in those buildings, and had then come to the conclusion as to how far the building had been fitted for the purpose. He hoped that the rising generation of architects would learn the extreme value of the objects they saw inside the museums, and always recognise that these were of far greater importance than the buildings themselves. Until they knew the uses of the buildings, and the manner in which the different objects should be seen, they were utterly unable to design such a building as they ought. He trusted that Mr. Granger's paper would be the commencement of a new system of essays on our public buildings,—in discussing them not according to their external appearance, so much as the actual purpose for which they were designed.

The President remarked that Mr. Granger had certainly described very lucidly the fittings and the collections contained in the museums visited by him last year, and, with Mr. Rickman, he felt thankful to Mr. Granger for having done so. He would have been glad, however, if Mr. Granger had not ignored all construction in the way he appeared to have done, and he hoped that in his reply they might hear one or two facts about the buildings themselves. For instance, he would like to know whether those museums, which covered a vast amount of ground, were lighted from the roof in the upper stories, or by windows; also, if they were fireproof in their construction, and, if so, of what materials the floors and stairs were made. These would be interesting matters to them as architects. One item of information given by Mr. Granger was very interesting,—viz., as to the advantages to be derived from photographs of accidents. When in Seville, a few months ago, he was lucky enough to obtain some very good photographs of the lamentable accident at the Cathedral, where one of the four great central piers fell, bringing down with it a corresponding portion of the vaulting. The photographs showed curiously how intact a large portion of the pier was when it fell to the ground, thus giving evidence of the excellent material of which it was constructed.

The vote of thanks was then put, and very heartily received.

Mr. Granger, in his reply, said that in reference to the modern methods of construction used in the case of these museums, he had a capital opportunity of seeing those at Leipzig. The results would be found in his paper when it was published *in extenso*. In some of the buildings which he visited,—as, for instance, those at Hamburg,—the construction and arrangements did not strike him as being particularly good, so far as the structure or the placing of the windows was concerned. The external appearance of many of the buildings made no impression on his mind, and he kept no notes of the mouldings, &c., some of which he must say were execrable.

The President intimated that the next meeting would take place on June 2, to receive the report of the scrutineers appointed to check the election of the Council, Standing Committees, and auditors for the year of office 1890-91, and to declare the names of those elected. A paper would also be read on "An Arab house in Cairo" by Count d'Hulst.

The proceedings then terminated.

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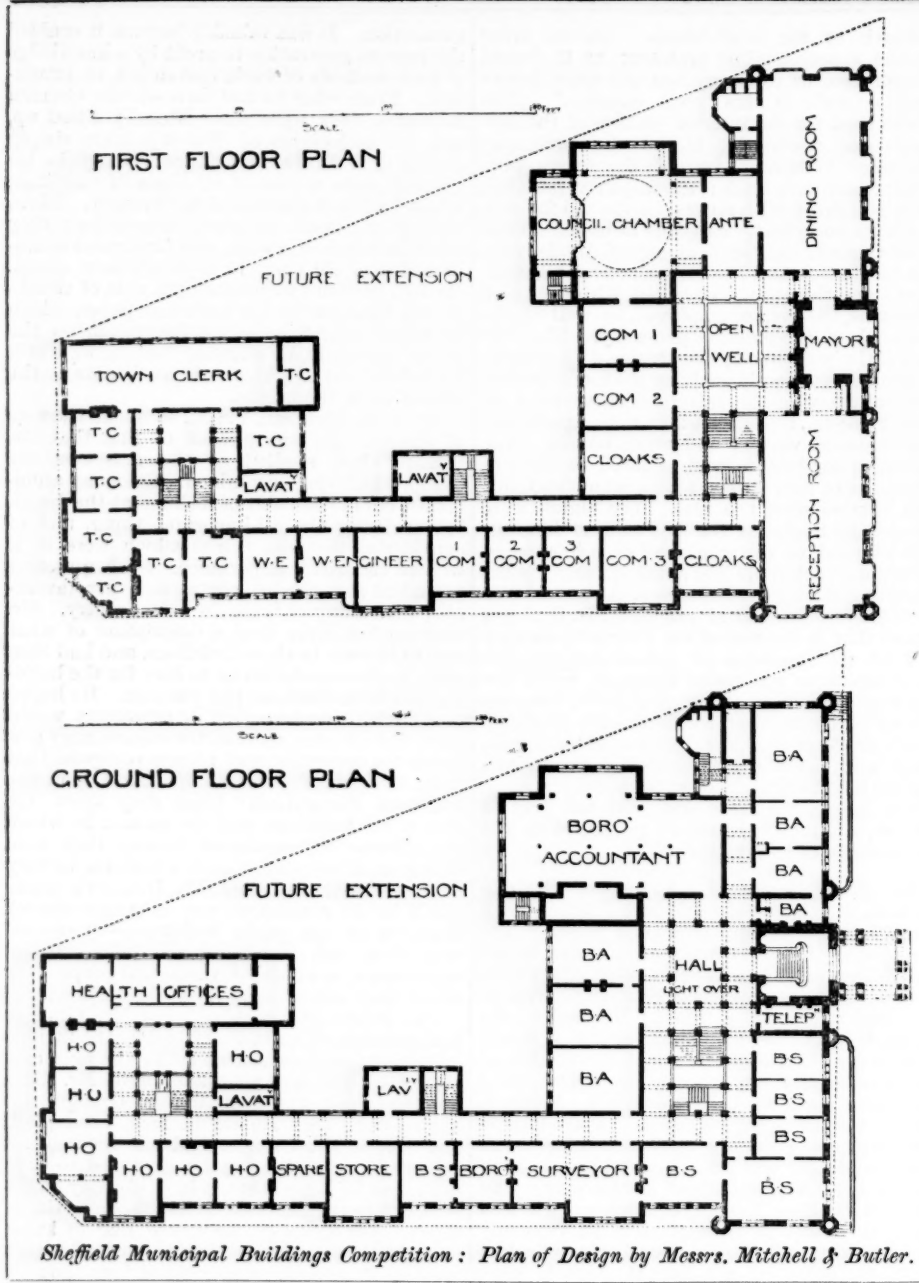
* We presume that Mr. Robins means in their individual capacity as architects, and not as holders of the Godwin Bursary, which was expressly founded for the promotion of the study of works of modern architecture *abroad*.—ED.



Sheffield Municipal Buildings Competition: Plan of Design by Messrs. Mitchell & Butler.

Illustrations.

DESIGN FOR SHEFFIELD MUNICIPAL BUILDINGS.

THIS is the perspective view of the design sent in by Messrs. Mitchell & Butler, and on which we have already commented in our Notes on Architecture at the Royal Academy. Plans of two floors are appended.

We regret that, the drawing being obviously by Mr. Arnold Mitchell, his name alone was at first inadvertently appended to the title on the lithograph, instead of that of Messrs. Mitchell & Butler; this has been corrected in a portion of this issue, but the mistake was not noticed in time for its correction on all the copies of the lithograph.

DESIGN FOR CHURCH HOUSE, WESTMINSTER.

THIS elevation, which is now among the drawings hung in the architectural room at the Royal Academy, represents the north side, towards Dean's Yard, of a design prepared by Mr. J. T. Micklethwaite and Mr. Somers Clarke for the Church House at Westminster. The plan would have occupied the irregular quadrangle between Dean's Yard, Tufton-street, and Great and Little Smith streets. The left-hand block shown on the elevation contains the chapel above and library under; in the centre is the entrance gateway with the ante-chapel over it; the lower block on the right contains committee-rooms on the ground-floor and the Bishop's Convocation House above. Other portions of the plan, arranged round the quadrangle, would have included a great hall and a Lower Convocation House, &c.

The design was originally made at the request of several members of the Council, and the aim of the architects was to treat it so that it might grow naturally out of the practical requirements of the building, and at the same time have a character partly ecclesiastical and partly palatial, suited to the dignity of its purpose and the important site which it was intended to occupy.

PREMISES, No. 40, WIGMORE-STREET.

THIS building has been erected for Mr. Carl Bechstein, pianoforte manufacturer.

The front is built entirely of terra-cotta, made by Messrs. Doulton & Co.

Mr. Thomas E. Collcutt is the architect. The drawing from which the illustration is taken is hung in the Architectural Room at the Royal Academy.

HOUSE AT NORTHWOOD.

THIS bungalow-house has been built at Northwood, an estate near Pinner, and was designed with a view to great economy, the whole of the bedrooms being in the mausard roof. The house contains a hall, two sitting-rooms, kitchen and offices, five bedrooms, and a bath-room. The contract-price was 620*l*. The walls are faced with red bricks, and the roofs are tiled. The verandah and porch floors are laid in tiles, and the whole of the woodwork is painted white and varnished. The builder was Mr. S. Barnett, of 83, High-road, Kilburn, and the architect was Mr. R. A. Briggs, A.R.I.B.A.

HOUSE AT HAMPSTEAD.

THIS house is about to be built at Hampstead. The walls will be faced with red bricks, and the roofs will be tiled. The two large circular bays above the cill level will be cemented and painted white to match the wood-work. The house contains a large hall with gallery, dining, drawing, and billiard-rooms, kitchen and offices; six bed-rooms and a dressing-room on the first-floor, and two servants' rooms on the second-floor.

The illustration is from a drawing by the architect, Mr. R. A. Briggs, A.R.I.B.A.

THE ARCHITECTURAL ASSOCIATION:

THE PROPOSED NEW DEPARTURE.

THE last ordinary general meeting of this Association for session 1889-90 was held on Friday evening, the 16th inst., at 9, Conduit-street, Mr. Leonard Stokes, President, in the chair.

The minutes of the previous meeting having been read and confirmed, some discussion arose as to the resolution passed at the previous meeting instructing the scrutineers of the votes for the election of the Committee to announce the number of votes recorded for each candidate.

Mr. T. E. Pryce moved that the resolution in question should be rescinded.

Mr. H. D. Appleton seconded.

Mr. Hugh Stannus, Mr. H. O. Cresswell, and Mr. C. H. Brodie, having spoken in favour of the motion to rescind,

Mr. A. O. Collard spoke in defence of the resolution arrived at at the previous meeting. He said that it was of interest to the members at large to know what numbers of votes were recorded for the members nominated for the Committee. Certain candidates whom a large section of the members might wish to see elected might not perhaps be successful, and it would be of interest both to the candidates themselves and to the members to see how they stood in the voting.

Mr. Bernard Dicksee moved as an amendment that the numbers of votes recorded for the successful candidates only be announced, and that the numbers for the members not elected be not declared.

Mr. E. Woodthorpe seconded this amendment, which, on being put, was lost by a large majority.

The Chairman then put Mr. Pryce's resolution to rescind the motion in question, which was declared lost, although only by a small majority.

The report of the scrutineers as to the election of officers and committee was then presented.

Mr. Leonard Stokes was unanimously re-elected President, and Messrs. F. T. Baggallay and H. O. Cresswell were unanimously elected Vice-Presidents.

For the Committee the following were the results of the voting:—H. D. Appleton, 197 votes; T. E. Pryce, 173; John Slater, 153; A. B. Pite, 141; G. C. Horsley, 130; W. Burrell, 128; F. Hooper, 128; G. R. Julian, 128; Owen Fleming, 117; E. W. Mountford, 116. (The foregoing were declared elected.) The candidates not elected were:—P. J. Marvin, 114; A. C. B. Booth, 110; A. O. Collard, 92; T. McLaren, 86; B. F. Fletcher, 84; A. W. Earle, 68; F. T. W. Goldsmith, 55; F. M. Simpson, 45; and F. M. Elgood, 34.

Mr. H. W. Pratt was unanimously re-elected Treasurer, and Messrs. F. R. Farrow and E. S. Gale were unanimously re-elected honorary secretaries.

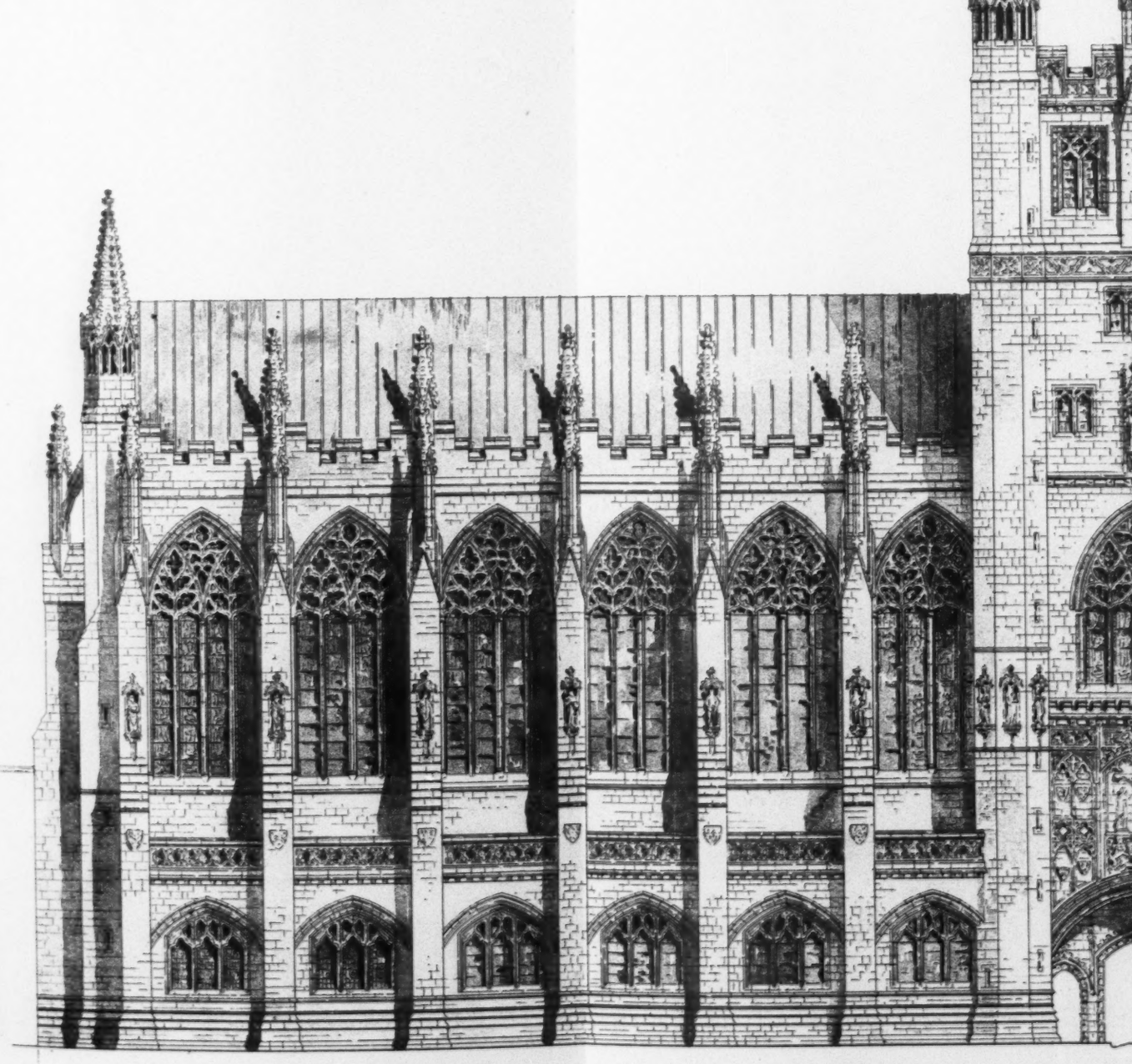
The President announced that Mr. Percy D. Smith had been elected Travelling Student of the Association for the current year, Mr. Tugwell obtaining the second prize.

The following gentlemen were elected members of the Association:- Messrs. J. Todd, R. H. Hunter, E. Cruikshank, H. Jefferis, A. G. Dutton, G. W. Haywood, S. Constanduros, H. G. Collins, S. D Mitcheson, and Hubert C. Corlette.

The meeting then proceeded to consider the report of the Committee appointed to enquire into the educational methods of the Association, the salient points of which we referred to in the leading article in last week's *Builder*.

Mr. John Slater, in moving the adoption of the report of the Educational Committee, said that the proposals embodied in it were of great importance. Indeed, the report might be said to be epoch-making in the history of the Association. He should like to point out that this movement commenced within the Classes themselves. It was only on the earnest representations of the members of the Classes and Class secretaries as to the dissatisfaction of the

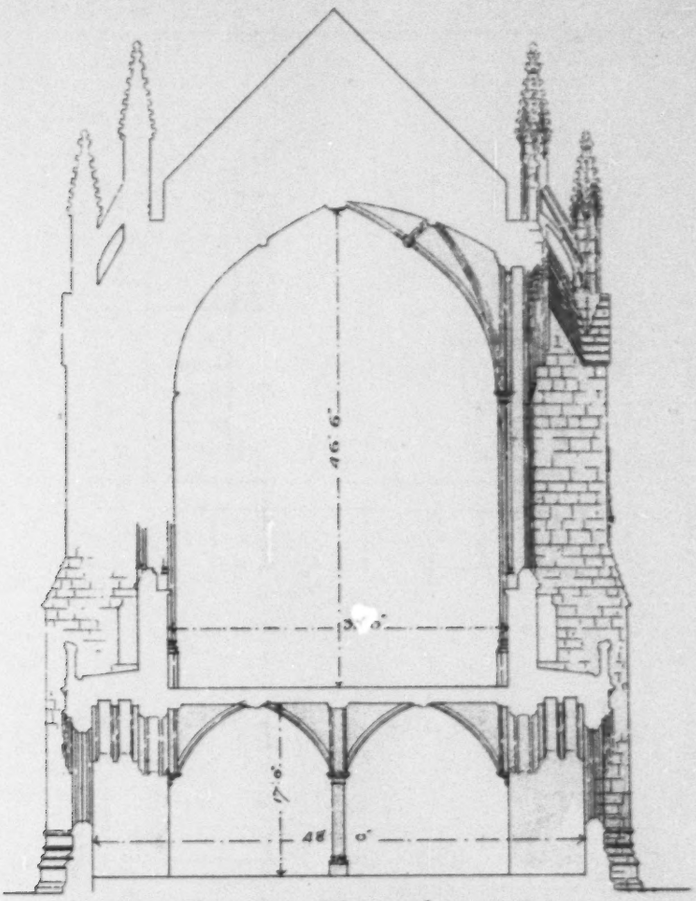
students themselves with the present means of education and the methods of receiving instruction within the Association, that the committee was appointed to institute an inquiry, first of all into the working of only two or three Classes. It was, however, soon found to be impossible to limit the inquiry in that way, and consequently it was determined to make an inquiry into the whole working of the Association. No one who had followed the history of the Association closely for the last ten years could be ignorant of the fact that the cry for change was no new one. It had been long evident that the voluntary principle had been loaded almost to the breaking-point; and successive Presidents, beginning with Mr. Cole A. Adams, had referred to the subject in their presidential addresses, and had pointed out that some radical change would become necessary in the near future. The sum and substance of the committee's report now before them was that that "near future," so often alluded to, had become the present. There was no doubt that the institution of the scheme of progressive examinations by the Royal Institute of British Architects had brought matters to a head. After all, examination was not education; and if the members of the Association were to enter for the examinations with the hope of passing them, it was necessary that some more efficient means of education than at present existed should be devised by the Association. He would just like to make one word of explanation as to the statement which had been made, and somewhat strongly criticised, that the *rôle* of the Royal Institute of British Architects was not that of a teaching body. He was afraid that that statement might have led some members of the Association to think that the Institute took no interest in education. That idea was erroneous, for the Institute was of opinion that some improved method of education was earnestly and strongly to be desired. Personally he thought it quite possible that in the future the Institute might have to become a teaching body; but it could not become a teaching body without very great changes in its constitution, and the changes which would be requisite would have to be very carefully thought over, and could not in any case be brought into operation for a very considerable time. That being the position of affairs, the Association thought that it ought not to wait for the Institute to devise a scheme of education, but that it ought to do its best to promulgate a scheme of its own. He might say that it appeared to him that the position of the Institute in relation to the architectural world was analogous to that of the University of London in relation to the educational world. Although the University of London was established only as an examining body, and not as a teaching body, yet its beneficial effect upon education had been very great and far-reaching. In like manner, he believed that the institution of the Architectural Examination would have a wonderfully fostering effect upon architectural education throughout the country. Going back to the subject of the report, he should be very loath to disparage the voluntary system, which had been worked for so many years in the Association; but it should be remembered that when the Association was first started, and for many years afterwards, it was an Association entirely consisting of students meeting for mutual help and instruction. So long as the only classes were the Class of Design and the Class of Construction it was very easy indeed to adhere to the voluntary system and to have unpaid visitors coming down time after time to help with their advice to the students; but they now had eighteen different classes or courses of lectures, with an aggregate attendance of some three hundred students. How was it possible for voluntary effort to cope with that enormous amount of work? They could not expect competent members to give up their time for that purpose. On the other hand, he was quite sure that it would be possible to find amongst the ranks of the Association some talented individuals who would be found willing to give their time to educational work. The Association had, *nolens volens*, become a great teaching body, and it behoved them to be as efficient in their work as possible. It should be remembered that they were not starting upon altogether new lines. They had had a few Classes with paid instructors for some few years past, and it seemed to him that the knell of the voluntary system was struck as soon as they instituted classes with regular permanent paid instructors. They would see from the report that the committee had taken a considerable amount of evidence as to what should be the basis of the instruction which it was recommended that the Association should endeavour to give; and that evidence was almost unanimously to the effect that the scheme of examinations which the Institute had set forth should be taken as the basis of the proposed curriculum. But, nevertheless, they all felt that there were a number of other important subjects which were not set forth in the Institute programme,—subjects without some knowledge of which an architect's education could not be said to be complete,—and therefore it would be found from a perusal of the report that, while the sub-committee proposed the Institute programme as the basis of the curriculum, they by no means meant it to be regarded as the limit of the instruction which they proposed to offer by this scheme. There was one new feature which had been introduced into the programme which the sub-committee had drawn up,—viz., the studio,—where members could meet and do their drawings. It was a modification of the studio system which they found abroad. Such studios as that which it was now proposed to establish were, however, not altogether unknown to members of the Association; and those who had experience of them were perfectly convinced that the benefit to the student drawing with a number of his fellows, and having their friendly advice and criticism, was of the greatest possible benefit and assistance to him. Therefore the committee had made such a studio a cardinal feature of their proposed scheme. He did not propose to go through the curriculum which the committee had laid down. They did not put it forward as a perfect scheme, but they had endeavoured to base it as closely as possible upon the lines of the old classes which had been established by the Association. One new and important feature had been suggested, viz., the day classes. The committee felt very strongly that those architects in practice who were responsible for pupils ought to give them time in which to obtain instruction otherwise than in the office, so that they would not be compelled to work every evening, or nearly so, when they had some claim to relaxation and rest. He should like to say that he was quite sure that nothing had been farther from the wish or the intention of the members of the Education Committee than to enter into rivalry with any existing institution. They believed that there was room for all the means of architectural education which we had in London, and that the University College classes, the King's College classes, and the Academy classes, would not be swamped by the scheme which the committee had propounded. They did not expect to start this big scheme cut and dried in its entirety by the beginning of next session. Its adoption must be gradual, and to a very considerable extent at first of a tentative character. They hoped that the Classes of the Association would continue very much as they had been carried on in the past, but that instead of having sporadic instructors they would be able to appoint regular paid instructors. With regard to the question of fees the committee had come to the conclusion that for anyone who wanted to go through the whole course, ten guineas—five guineas for the lectures and five guineas for the studio—was not too much to ask. If they looked at their profession as a liberal profession, he would ask was there any other profession in which the education of those entering it could be obtained at so low a rate? It might be said that they were legislating too exclusively for the purely student class, and that not everybody would wish to go through the whole curriculum. But the committee quite hoped and believed that the scheme which they propounded would be of use to others than the merely new students. They confidently hoped that many country assistants would desire to come into some of the classes or to attend some of the courses of lectures without necessarily having to attend the other courses. In order to meet the wants of such students, the committee had fixed the rate of payment at 2s. 6d. per lecture—a fee which he thought was a very moderate one. Of course the committee had had to look upon the matter in some degree in a commercial light, but it might be taken that 2s. 6d. per lecture would be the *maximum* fee which a student would have to pay. He did not think, therefore, that the scheme of charges which the committee had drawn up was too high. They contemplated that an aggregate number of 100 students would join these classes and the studio; that was to say, not 100 of each year's standing, but 100 for the four years' course. That was only about one-third of the number of members who now attended the various classes; if they could only get that number they thought that the scheme would be self-supporting. Then in connexion with the report there was another proposal which might excite some comment, viz., the proposal for raising the annual subscription of the members of the Association. He himself very much regretted that when that proposal was brought before the Association about five years ago it was not carried, because he firmly believed that if that proposal had been carried then they would not have a dozen fewer members now than they had. The only wonder was that they had gone on with a half-guinea subscription for so long. He found that the work of the Association, including classes, meetings, and visits to buildings, extended over thirty-two weeks of the year; and if they made the calculation they would find that their half-guinea subscription, entitling them to the advantages of the classes, the meetings, and the visits, worked out at a little over 3¾d. per week! Did they seriously believe that if the subscriptions were raised to a guinea, there would be any large number of members who would fall out of the ranks because they could not afford to pay it? Even apart from the extra work and expense involved in the adoption of the proposed new scheme, the time had come when the detailed routine work of the Association had so greatly increased that it could go on with honorary secretaries only no longer. Was it right that any member of that Association should be expected to devote his time to their affairs to such an extent that he was 40*l.* or 50*l.* a year out of pocket?—for that, he was assured, was the case. They ought not to let such a state of things continue. They must remember that if that educational scheme, or even part of it, was carried out, it would add an enormous amount of clerical work to the present labours of the officers of the Association. The Association was barely paying its way now: it was only by starving its work that it did so. Let them look at the library, for instance. Would not the library of the Association be more valuable if there was some one there every day to change books? But that could not be done at present, because they had no one to do the work. How, then, could they avoid coming to the conclusion that they must raise the subscription if they were to go on with anything like the success which had attended their work hitherto? It should be borne in mind that the proposal to raise the subscription was only intended to apply to town members, because,—much as they regretted it,—they did not see their way to offer the whole benefits of the Association to the country members. There might be some means of doing that, but he did not see what those means were at present, and, therefore, it would not be desirable to raise the subscription of country members. If the present scheme were adopted, it would be very easy to frame a precise definition of a country member, so that only those who benefited by the full work of the Association should pay the increased subscription. Before he sat down he should like to make an earnest appeal to the older members of the Association, many of whom he saw around him who had derived great benefit from the Classes when they were in them, and who had generously contributed much assistance in carrying them on in after years. He asked those old members not too hastily to assume that the new scheme was a bad one because it was a new one. Let them ask themselves whether it was not at least possible that those members of the Association who were now more closely in touch with its workings, might see more clearly than others the defects and shortcomings of the present system. New responsibilities were created by new necessities. The special committee, in presenting that report, invited criticism; but he asked that the old members should not withdraw their sympathy and countenance from the Association, but should give them the benefit of their experience and judgment and business insight. If they would only do that he did not fear for the future of the Association, but rather would have strong grounds for hope that as its past had been a glorious one, so a great career of increasing



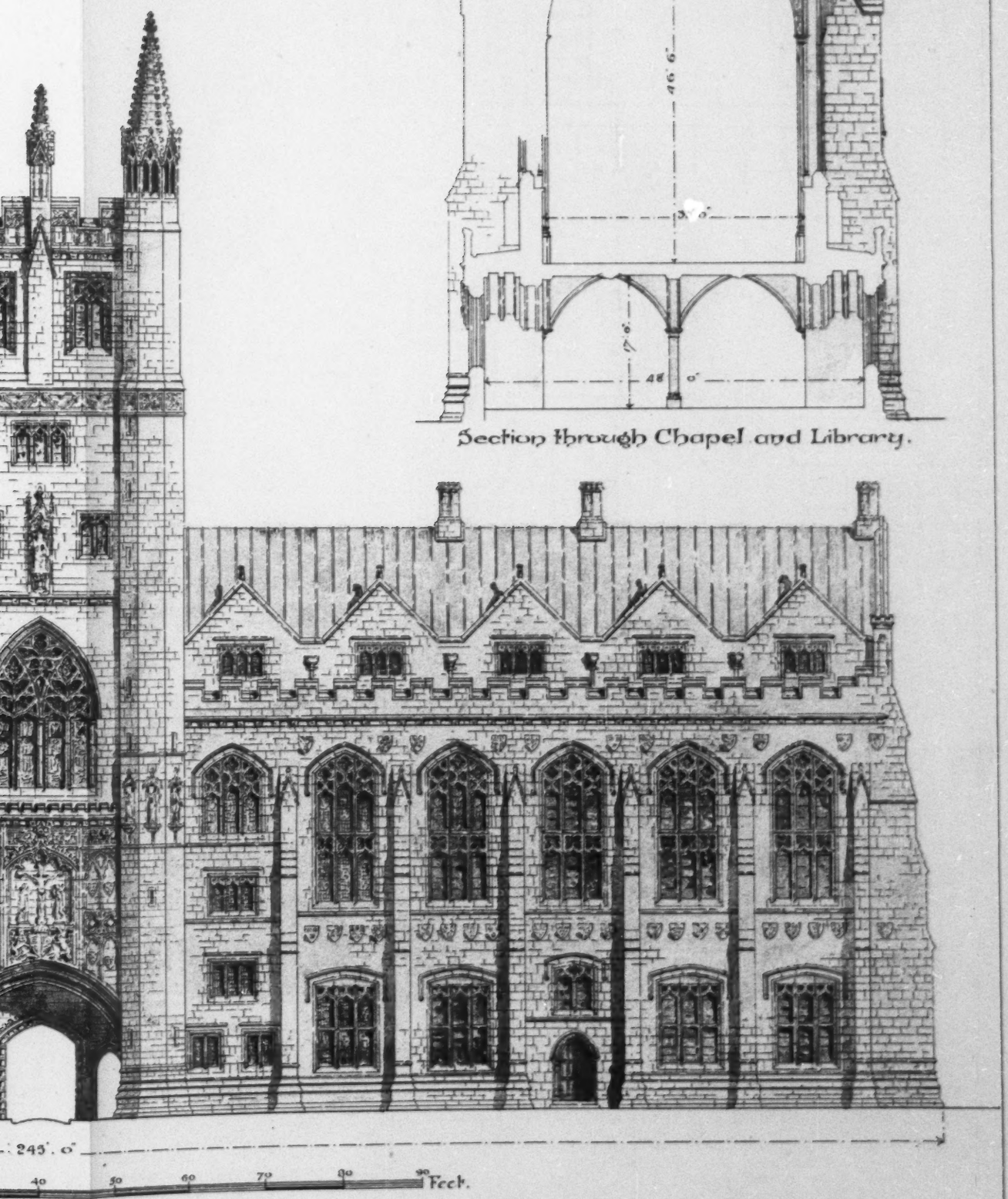
DESIGN FOR PROPOSED CHURCH HOUSE, WESTMINSTER.—Messr

NORTH FRONT FACING DEA

Royal Academy Exhibition, 1890.



Section through Chapel and Library.



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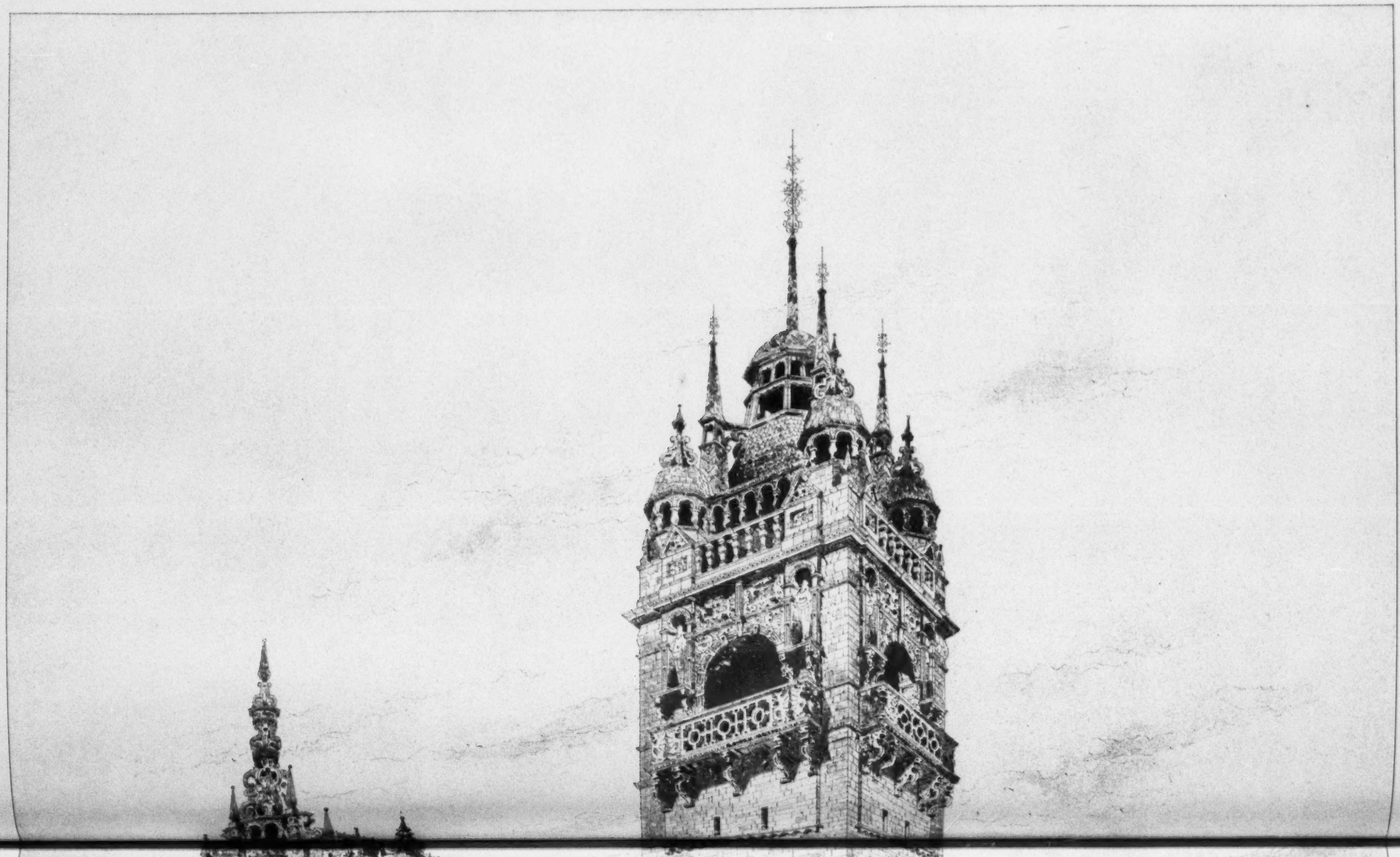
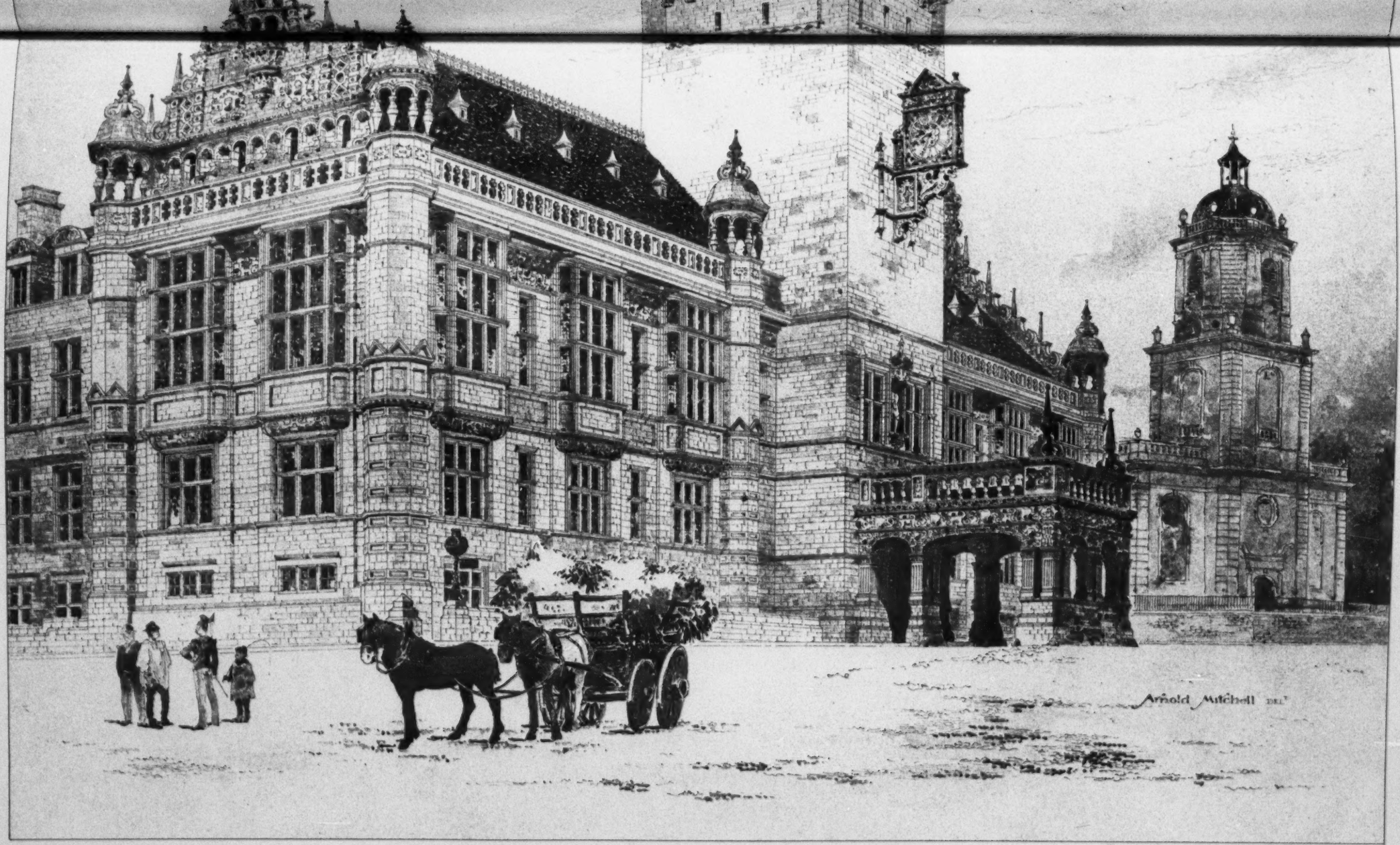
ESSRS. J. T. MICKLETHWAITE AND SOMERS CLARKE, ARCHITECTS.

DEAN'S YARD.





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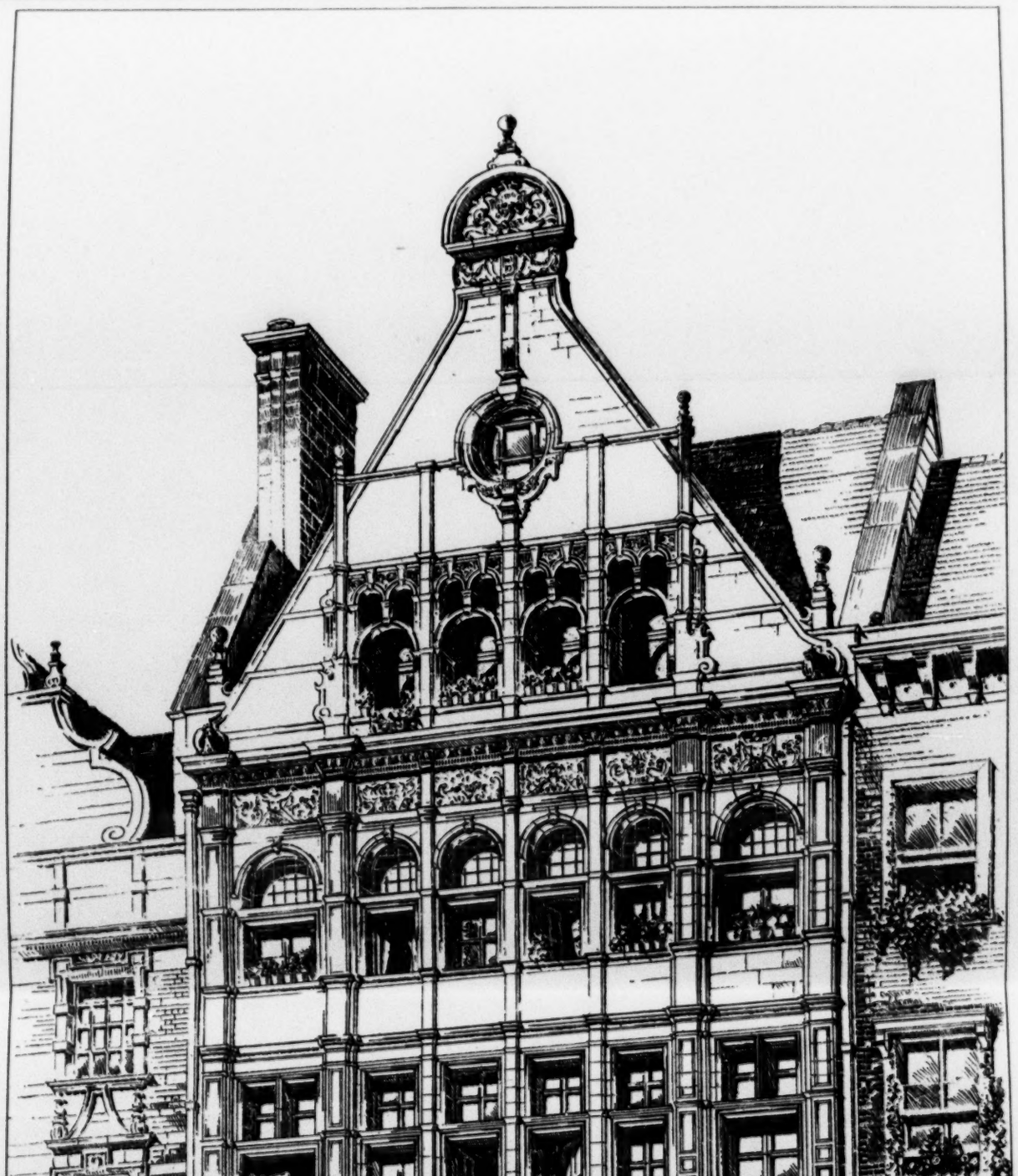
PERSPECTIVE VIEW OF DESIGN SUBMITTED IN COMPETITION FOR SHEFFIELD MUNICIPAL BUILDINGS.—By Mr. Arnold Mitchell, A.R.I.B.A.

No. 1825 Royal Academy Exhibition, 1890.

PHOTO-LITHO. SPRAGUE & Co. 22, MARTINS LANE CANNON ST. LONDON, E.C.

NEW FRONT, 40, WIGMORE STREET.—Mr. T.E Collcutt, F.R.I.B.A., Architect.

No. 1864 Royal Academy Exhibition, 1890.



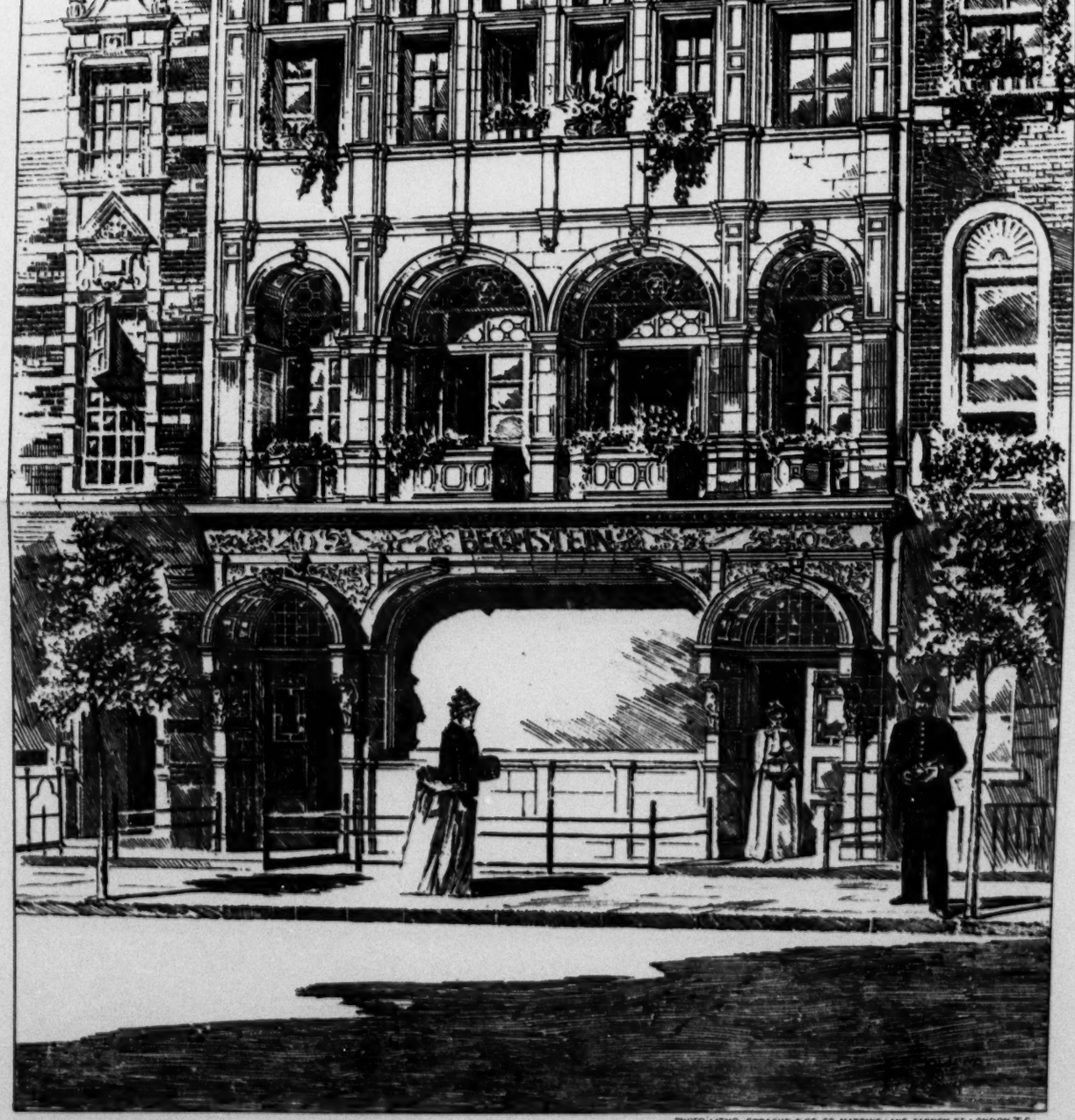
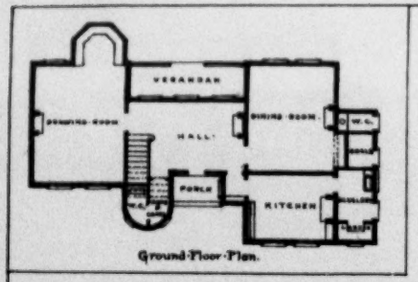


PHOTO LITHO. SPRAGUE & Co. 28, MARTINS LANE, CANNON ST. LONDON, E.C.

NEW FRONT, 40, WIGMORE STREET.—Mr. T.E Collcutt, F.R.I.B.A., Architect.

No. 1864 Royal Academy Exhibition, 1890.



HOUSE AT NORTHWOOD.—MR. R. A. BRIGGS, A.R.I.B.A., ARCHITECT.

PHOTO-LITHO. SPRAGUE & Co., 82, MARTINS LANE, CANNON ST. LONDON, E.C.

HOUSE AT HAMPSTEAD.—Mr. R. A. Briggs, A.R.I.B.A., Architect.

students themselves with the present means of education and the methods of receiving instruction within the Association, that the committee was appointed to institute an inquiry, first of all into the working of only two or three Classes. It was, however, soon found to be impossible to limit the inquiry in that way, and consequently it was determined to make an inquiry into the whole working of the Association. No one who had followed the history of the Association closely for the last ten years could be ignorant of the fact that the cry for change was no new one. It had been long evident that the voluntary principle had been loaded almost to the breaking-point; and successive Presidents, beginning with Mr. Cole A. Adams, had referred to the subject in their presidential addresses, and had pointed out that some radical change would become necessary in the near future. The sum and substance of the committee's report now before them was that that "near future," so often alluded to, had become the present. There was no doubt that the institution of the scheme of progressive examinations by the Royal Institute of British Architects had brought matters to a head. After all, examination was not education; and if the members of the Association were to enter for the examinations with the hope of passing them, it was necessary that some more efficient means of education than at present existed should be devised by the Association. He would just like to make one word of explanation as to the statement which had been made, and somewhat strongly criticised, that the *rôle* of the Royal Institute of British Architects was not that of a teaching body. He was afraid that that statement might have led some members of the Association to think that the Institute took no interest in education. That idea was erroneous, for the Institute was of opinion that some improved method of education was earnestly and strongly to be desired. Personally he thought it quite possible that in the future the Institute might have to become a teaching body; but it could not become a teaching body without very great changes in its constitution, and the changes which would be requisite would have to be very carefully thought over, and could not in any case be brought into operation for a very considerable time. That being the position of affairs, the Association thought that it ought not to wait for the Institute to devise a scheme of education, but that it ought to do its best to promulgate a scheme of its own. He might say that it appeared to him that the position of the Institute in relation to the architectural world was analogous to that of the University of London in relation to the educational world. Although the University of London was established only as an examining body, and not as a teaching body, yet its beneficial effect upon education had been very great and far-reaching. In like manner, he believed that the institution of the Architectural Examination would have a wonderfully fostering effect upon architectural education throughout the country. Going back to the subject of the report, he should be very loath to disparage the voluntary system, which had been worked for so many years in the Association; but it should be remembered that when the Association was first started, and for many years afterwards, it was an Association entirely consisting of students meeting for mutual help and instruction. So long as the only classes were the Class of Design and the Class of Construction it was very easy indeed to adhere to the voluntary system and to have unpaid visitors coming down time after time to help with their advice to the students; but they now had eighteen different classes or courses of lectures, with an aggregate attendance of some three hundred students. How was it possible for voluntary effort to cope with that enormous amount of work? They could not expect competent members to give up their time for that purpose. On the other hand, he was quite sure that it would be possible to find amongst the ranks of the Association some talented individuals who would be found willing to give their time to educational work. The Association had, *nolens volens*, become a great teaching body, and it behoved them to be as efficient in their work as possible. It should be remembered that they were not starting upon altogether new lines. They had had a few Classes with paid instructors for some few years past, and it seemed to him that the knell of the voluntary system was struck as soon as they instituted classes with regular permanent paid instructors. They would see from the report that the committee had taken a considerable amount of evidence as to what should be the basis of the instruction which it was recommended that the Association should endeavour to give; and that evidence was almost unanimously to the effect that the scheme of examinations which the Institute had set forth should be taken as the basis of the proposed curriculum. But, nevertheless, they all felt that there were a number of other important subjects which were not set forth in the Institute programme,—subjects without some knowledge of which an architect's education could not be said to be complete,—and therefore it would be found from a perusal of the report that, while the sub-committee proposed the Institute programme as the basis of the curriculum, they by no means meant it to be regarded as the limit of the instruction which they proposed to offer by this scheme. There was one new feature which had been introduced into the programme which the sub-committee had drawn up,—viz., the studio,—where members could meet and do their drawings. It was a modification of the studio system which they found abroad. Such studios as that which it was now proposed to establish were, however, not altogether unknown to members of the Association; and those who had experience of them were perfectly convinced that the benefit to the student drawing with a number of his fellows, and having their friendly advice and criticism, was of the greatest possible benefit and assistance to him. Therefore the committee had made such a studio a cardinal feature of their proposed scheme. He did not propose to go through the curriculum which the committee had laid down. They did not put it forward as a perfect scheme, but they had endeavoured to base it as closely as possible upon the lines of the old classes which had been established by the Association. One new and important feature had been suggested, viz., the day classes. The committee felt very strongly that those architects in practice who were responsible for pupils ought to give them time in which to obtain instruction otherwise than in the office, so that they would not be compelled to work every evening, or nearly so, when they had some claim to relaxation and rest. He should like to say that he was quite sure that nothing had been farther from the wish or the intention of the members of the Education Committee than to enter into rivalry with any existing institution. They believed that there was room for all the means of architectural education which we had in London, and that the University College classes, the King's College classes, and the Academy classes, would not be swamped by the scheme which the committee had propounded. They did not expect to start this big scheme cut and dried in its entirety by the beginning of next session. Its adoption must be gradual, and to a very considerable extent at first of a tentative character. They hoped that the Classes of the Association would continue very much as they had been carried on in the past, but that instead of having sporadic instructors they would be able to appoint regular paid instructors. With regard to the question of fees the committee had come to the conclusion that for anyone who wanted to go through the whole course, ten guineas—five guineas for the lectures and five guineas for the studio—was not too much to ask. If they looked at their profession as a liberal profession, he would ask was there any other profession in which the education of those entering it could be obtained at so low a rate? It might be said that they were legislating too exclusively for the purely student class, and that not everybody would wish to go through the whole curriculum. But the committee quite hoped and believed that the scheme which they propounded would be of use to others than the merely new students. They confidently hoped that many country assistants would desire to come into some of the classes or to attend some of the courses of lectures without necessarily having to attend the other courses. In order to meet the wants of such students, the committee had fixed the rate of payment at 2s. 6d. per lecture—a fee which he thought was a very moderate one. Of course the committee had had to look upon the matter in some degree in a commercial light, but it might be taken that 2s. 6d. per lecture would be the *maximum* fee which a student would have to pay. He did not think, therefore, that the scheme of charges which the committee had drawn up was too high. They contemplated that an aggregate number of 100 students would join these classes and the studio; that was to say, not 100 of each year's standing, but 100 for the four years' course. That was only about one-third of the number of members who now attended the various classes; if they could only get that number they thought that the scheme would be self-supporting. Then in connexion with the report there was another proposal which might excite some comment, viz., the proposal for raising the annual subscription of the members of the Association. He himself very much regretted that when that proposal was brought before the Association about five years ago it was not carried, because he firmly believed that if that proposal had been carried then they would not have a dozen fewer members now than they had. The only wonder was that they had gone on with a half-guinea subscription for so long. He found that the work of the Association, including classes, meetings, and visits to buildings, extended over thirty-two weeks of the year; and if they made the calculation they would find that their half-guinea subscription, entitling them to the advantages of the classes, the meetings, and the visits, worked out at a little over 3¾d. per week! Did they seriously believe that if the subscriptions were raised to a guinea, there would be any large number of members who would fall out of the ranks because they could not afford to pay it? Even apart from the extra work and expense involved in the adoption of the proposed new scheme, the time had come when the detailed routine work of the Association had so greatly increased that it could go on with honorary secretaries only no longer. Was it right that any member of that Association should be expected to devote his time to their affairs to such an extent that he was 40*l.* or 50*l.* a year out of pocket?—for that, he was assured, was the case. They ought not to let such a state of things continue. They must remember that if that educational scheme, or even part of it, was carried out, it would add an enormous amount of clerical work to the present labours of the officers of the Association. The Association was barely paying its way now: it was only by starving its work that it did so. Let them look at the library, for instance. Would not the library of the Association be more valuable if there was some one there every day to change books? But that could not be done at present, because they had no one to do the work. How, then, could they avoid coming to the conclusion that they must raise the subscription if they were to go on with anything like the success which had attended their work hitherto? It should be borne in mind that the proposal to raise the subscription was only intended to apply to town members, because,—much as they regretted it,—they did not see their way to offer the whole benefits of the Association to the country members. There might be some means of doing that, but he did not see what those means were at present, and, therefore, it would not be desirable to raise the subscription of country members. If the present scheme were adopted, it would be very easy to frame a precise definition of a country member, so that only those who benefited by the full work of the Association should pay the increased subscription. Before he sat down he should like to make an earnest appeal to the older members of the Association, many of whom he saw around him who had derived great benefit from the Classes when they were in them, and who had generously contributed much assistance in carrying them on in after years. He asked those old members not too hastily to assume that the new scheme was a bad one because it was a new one. Let them ask themselves whether it was not at least possible that those members of the Association who were now more closely in touch with its workings, might see more clearly than others the defects and shortcomings of the present system. New responsibilities were created by new necessities. The special committee, in presenting that report, invited criticism; but he asked that the old members should not withdraw their sympathy and countenance from the Association, but should give them the benefit of their experience and judgment and business insight. If they would only do that he did not fear for the future of the Association, but rather would have strong grounds for hope that as its past had been a glorious one, so a great career of increasing

usefulness was open to it in the future. He begged formally to move the adoption of the report.

Mr. A. O. Collard seconded the motion. He said that he believed some members were in favour of dividing the report into two portions, separating the proposal to increase the annual subscription from that dealing with the educational curriculum. But he did not see how that would have been feasible, for the two things were inseparably connected. As Mr. Slater had pointed out, the present annual subscription of half-a-guinea was ridiculously low, considering the advantages derived by the members; and even if it were increased to a guinea the cost of the advantages of the Association to its town members would only be about 1d. a day. It was most essential that the Association should be able to put its secretarial work upon a sound footing. The proposal was to have an assistant secretary who should be paid, and who should work under the direction of honorary secretaries, just as in the Institute the Secretary was a paid officer, although the chief secretary was the Honorary Secretary. Although, as Mr. Slater had said, the proposed curriculum had been framed with a special view to the necessities of those who went in for the Institute Examinations, which did not profess to embody everything necessary for the education of an architect. What, however, was lacking in the course of studies prescribed in the examinations would be supplied by work under the proposed curriculum. The institution of the new education scheme as a whole would no doubt tend to the elevation and improvement of the Examination itself, at the character of which there were some who were at present only too ready to sneer. Some might think that the proposed fee of ten guineas,—five guineas for the lectures and classes and five guineas for the studio,—was too high; but while he did not think so himself, having regard to what they would get in return for it, he was quite alive to the fact that the fees would press heavily upon some of the members, and he could not help thinking that some arrangement might be and ought to be made by which the masters should pay the fees either in whole or in part. As to the proposed institution of day-classes, he thought the idea was an admirable one, and possibly it might be found advantageous for youths who contemplated entering architects' offices to spend a year or two in those day-classes before entering upon their articles. They would then come to the study of the work of the profession with some idea of what was before them.

Mr. Cole A. Adams said that there could be no doubt that by the adoption of the proposals contained in the report they would be making an important new departure in the history of the Association. He could only have wished that there had been present on that important occasion a larger number of the senior members of the Association. With regard to the scheme which had been brought forward by the committee, he wished to give his own unhesitating thanks to the members of the committee for their very admirable report. He was quite sure that all the members of the Association would join him in that expression of thanks, even although they might differ as to some of the recommendations made by the committee. They were also very much indebted to Mr. Slater for the admirable and lucid manner in which he had brought the scheme before them. But there was one part of Mr. Slater's speech, which found an echo in that of the seconder, which seemed to foreshadow opposition to the proposals contained in the report on the part of the older members. He himself did not think that there was much ground for that fear; but, on the other hand, he must say that he could not regard the report, or, at any rate, the form of it, as absolutely faultless. With regard to the scheme generally, he felt that it was one which was inevitable. He had long felt that the time must come when the system of mutual help which had prevailed for so many years in the Association would have to be largely augmented by regular, systematic, paid assistance. That time had now arrived, and the question must be faced. Any attempt to put back the hands of the clock would be a mistake. But, at the same time, he would put in a plea for the retention of the mutual or voluntary system as far as possible. He had no doubt that that was the intention of the committee, but in a report such as that which had been presented to them, it would be impossible to clearly put everything that was in the minds of those who were responsible for it. He should be very sorry indeed to see the Association turned simply into a college of architecture, and for the old Association as they knew it to become a thing of the past. But was such a course either necessary or desirable? He did not think it was. While no doubt to a very large extent the future work of the Association must be conducted, upon the lines mentioned in the report, by systematic paid instructors, yet he thought it would be a great pity to eliminate the services of those who were willing to give voluntary assistance. He thought there would still be scope for the work of voluntary instructors. Part of the scheme proposed by the committee suggested the establishment of a studio which should have a salaried master. He would say at once that he did not think the proposed salary of 100*l.* a year for the master of the studio was at all adequate. He would be a very clever fellow indeed who would be able to undertake the work of the proposed studio and to carry out instruction in all the subjects included in the programme; and being a clever fellow, was it to be supposed that he would be content to value his services at only 100*l.* a year? It was not likely. But it was just in regard to the work of the proposed Studio where he thought voluntary assistance would best come in. The Association numbered within its ranks men of great artistic ability, as was evidenced, for instance, by the "Sketch-book"; and he thought it would be perfectly possible to enlist the services of many of those men as Visitors to the Studio. Many of them, he was quite sure, would be perfectly willing to take turns in visiting the studio for the purpose of inspecting the work of the students, and of giving them advice. If that feature could be introduced into the scheme of the studio, it would be one means of preserving the continuity of that element of voluntary help, and of maintaining that feeling of enthusiasm for their art, which together had been the mainstay of the Association in the past. The subject of colour-decoration, for instance, was one in which the services of such Visitors would be of great value to the Association. The Honorary Visitors to the proposed Studio would no doubt all be senior members of the Association,—men who were in practice for themselves, and who, although they would have no time to take part in the regular teaching of the classes, would be only too pleased to give occasional attendance and advice. By carrying out that system they would maintain that feeling of enthusiasm which, as he had said, had been for so long one of the mainstays of the work of the Association. Inadequate as the voluntary system had become to their present needs, and necessary as it was to engage paid assistants, yet it should be borne in mind that a reliance upon paid assistance alone involved the danger of the teaching becoming perfunctory and stereotyped. Therefore, he said, "Maintain the voluntary system in some part, at least, as a link between the past and the present." As to the question of the proposed increase of the annual subscription,—an increase which he had urged five years ago, when the proposal was defeated by a rather narrow majority—he regretted that the proposed increase was not then adopted; for he regarded it as an absolute necessity, if their work was to be carried on properly. He could have wished, however, that the proposal to increase the subscription had not been identified with the proposed change of curriculum. If the question could have been separated he thought it would have been better. They had present in that room, perhaps, two hundred members; but the Association numbered a thousand members; and were the two hundred to decide upon raising, not only their own subscription, but the subscription for the other eight hundred members? If the two questions could be separated, and if the opinions of the members at large on the subject could be taken by means of voting papers, he thought it would be a very desirable course to adopt. It was quite true that, as Mr. Slater and other speakers had said, that half-guinea subscription was ridiculously small to those town members who were reaping the full advantages offered by the Association; but it should be remembered that an extra half-a-guinea a year might be regarded as a ridiculously large subscription by those who were getting nothing in return for it. He could not but think, in the light of past experience, that it was a question at the present time upon which it was desirable that they should take a plebiscite of the members. Personally he was strongly in favour of the increase of the annual subscription, but unless that question could be separated from that of the adoption of that part of the report which dealt with the curriculum, he should ask leave to move as an amendment to Mr. Slater's motion, that the opinion of the members as a whole be taken by voting papers on the question of the increase of subscription; for he did not think it would be right that that meeting, which numbered only one-fifth of the members of the Association, should take upon itself to decide so important a question, after the opposition a similar proposal met with some five years ago.

Mr. J. A. Gotch said he very heartily welcomed the report of the committee, as it expressed very clearly views which he had been cherishing for a good many years. He was exceedingly pleased to see that the committee had grappled so thoroughly with the question, and had brought before them so comprehensive and so admirable a scheme. It appeared to him that to propose any half-measures would be worse than useless. While he thoroughly admired and appreciated the voluntary system of the past, it had long been apparent to him that it would be impossible to carry on the work of the Association with success by continuing to rely upon it. What they wanted was a thorough system of teaching by competent men,—men who would be able to devote themselves to teaching systematically. With regard to the proposed increase of the annual subscription of the members, his own feeling was that that question was now in an entirely different category to what it was four or five years ago. Even at that period he thought those who proposed the increase of the subscription had adequate reasons for doing so, although those reasons did not commend themselves to the majority of the members. But if they had adequate reasons then, how much more adequate were the arguments now put forward in support of the increase? He thought that in the Association as it would be worked under the proposed new educational scheme, the young architect would learn much more there than he would in the office of his principal. He was strongly in favour of the institution of day classes, because he thought it was a mistake to expect young men to work hard in learning their profession at the fag-end of the day. Young men in the prime of their strength and spirits might reasonably expect to have some time for relaxation and for the lighter occupations of life. Without the institution of day classes, what would be the position of young men entering upon the proposed curriculum? The earnest student would occupy his Saturday afternoons with visits to buildings; every alternate Monday he would be at the Institute meetings; and every alternate Friday at the Association meetings. What with these meetings and his work in the Classes and at the proposed studio, what time would remain to him for relaxation? Everything, in his opinion, pointed to the necessity of the establishment of day classes, and he only regretted that the committee had not seen their way to boldly recommend their institution at once. While the Association was making a change in its methods of procedure, why not make the change as complete as possible, and establish day classes? He was very much afraid that if the Association did not do so when making this new departure in their methods, they would be stereotyping and confirming evening work; and it might be much more difficult afterwards to institute day classes. The institution of day classes would be of special value to country members, many of whom would be able to come up and stay in London for a sufficiently long period to attend the courses of lectures, &c. One important point in that connexion was that country students needed to have a thorough general knowledge of construction, such as they would not necessarily get in a London architect's office. He quite agreed with Mr. Cole Adams as to the desirability of retaining voluntary work in the conduct of the Association as much as possible. The voluntary principle could, to quote the instance mentioned by Mr. Cole Adams, be very well maintained in connexion with such a class as that for the study of colour-decoration, where voluntary Visitors would be able to come down and give valuable advice; but in all matters relating to science and construction it would be much more advantageous to have regular lecturers,

taking up their subjects in a systematic way. For the proper teaching of such subjects continuity was a necessary element. How would it be possible, for instance, to conduct a class for the study of the principles of sanitary science on the voluntary system? If half-a-dozen men volunteered to come down and give instruction in that subject, one after the other, he thought the students in the class would obtain a very confused notion of the science of sanitation. He was convinced that with regard to nine-tenths of the proposed curriculum they would be obliged, to carry it out efficiently, to have a system of paid lecturers or teachers. No doubt, as had been suggested, they would be able to retain the voluntary system to a larger extent in the proposed studio. With regard to the question of fees to the lecturers or teachers, he was strongly inclined to the opinion that they should be paid partly by salary and partly by a capitation fee. He trusted that the meeting would adopt the report substantially as it had been presented by the committee. If they did, he believed that the Association would develope into the leading institution for the education of architects in Great Britain.

Mr. S. B. Beale said he quite agreed with the last speaker that the proposed day classes should be made part of the scheme under discussion. He wanted to know how, unless they were going to provide young architects with cast-iron constitutions, as well as with brains, they were going to get them to take up the proposed curriculum? He proposed to move that it be an instruction to the Committee of the Association that as an experiment day classes should be started concurrently with the initiation of the new programme of studies. They were all agreed that the young architect should be educated; but he maintained that without the day classes they would not be giving him a fair chance. Unless they saw to it that he had an opportunity of being educated in rational hours, he was afraid that the whole scheme of the special committee must be a failure.

The Chairman said that if Mr. Beale had read a little further on in the Report he would find that the committee did recommend the institution of day classes as part of the ordinary work of the Association. They strongly recommended that they should be started if possible.

Mr. Hugh Stannus said he rose rather to raise a point of order than for the purpose of discussing the elaborate report which was before them. It appeared to him that there were five or six distinct points raised by the recommendations contained in the report, and he very much regretted that the adoption of the report as a whole should have been moved,—he would not say thrust upon them,—*en bloc*. The special committee who were responsible for it, naturally felt very anxious about it and desired to see it adopted; but he thought that the various points could have been dealt with much better in discussion if the report had been divided up into heads or parts. It was exceedingly difficult to discuss it as it stood, for there was not even any numbering of the paragraphs. It would certainly have been the better for a little editing. He wished to ask Mr. Slater and those who were responsible for the report whether they could not take it back for reconsideration, with a view to its being arranged in such a way that it might be considered point by point. They would then have definite issues before them. At present some of them, while entirely sympathising with one portion of the report, were not in favour of other portions.

Mr. F. T. Baggallay said he should certainly oppose any motion for dividing the report into sections, for the whole thing hung together.

Mr. E. Woodthorpe said he agreed with Mr. Stannus as to the desirability of dividing the report into sections. He thought that the fees proposed were too heavy to be paid by the younger students. He could not agree with all that had been said in favour of the day-class system, nor could he agree that the studio or *atelier* system was everything that could be desired. He thought there was rather too much disposition on the part of some of them to join the eight hours movement. If young fellows wishing to advance in their profession were not disposed to use every available opportunity for study they could not expect to succeed. The wisdom of the proposal to raise the annual subscription was, he thought, doubtful. If it were true that the secretaries were 50*l*. a year out of pocket by their work for the Association, he thought it ought to be made up to them. Although, perhaps, the curriculum laid down by the committee was an ideal one, yet he thought the charges to be made to the young students were much too heavy, and, therefore, he thought it would be a pity to take the report *en bloc*.

Mr. H. L. Florence said that of all the speeches which he had heard that evening he felt most in sympathy with that of Mr. Cole Adams, for he thought it would be very desirable that the old spirit of enthusiasm for their art, which had prevailed in the Association from its commencement, should be kept up even throughout the proposed changes. He thought it would be regrettable if they were to change the Association into a mere educational machine. He felt sure they were all desirous and anxious to further and forward any scheme which might be considered advantageous to the general body. He was willing to accept as a whole the report which had been presented by the committee, although he thought there were certain things in which it fell short of what was desirable. He certainly hoped that the voluntary system would as far as possible be kept up, side by side with the new aids. The question of day classes involved a point of very great importance; and it seemed to him that it would not be a very difficult thing to establish them. If the proposed studio were worked in the day time as well as in the evening, he was convinced that many architects who had pupils would not only allow their pupils to attend, but would pay their fees. With regard to the general question of ways and means, he was not convinced by the figures put before them that the proposed new scheme would be self-supporting. Some important points, it appeared to him, had not been taken account of. Their library, for instance, would need to be greatly developed if it were to become at all adequate to the work of the Association under the new scheme. What they would really want, and what they wanted now very badly, was a proper reading-room. It was of no use pointing to the Institute Library as providing a proper reading-room, for that was not a room in which anyone could read with comfort. Therefore he thought the question of providing a good reading-room, where the members could read and study, was one of the first importance. It was impossible to get any permanent good merely from attending lectures. Besides listening to lectures, they must afterwards study and read up the subjects of which the lecturers treated. Students required adequate means for deliberate study, and one of the first essentials was a good reading-room. Besides that, the library itself would have to be improved in the number and character of its books. A past-President of the Association, who attached great importance to that point, had commissioned him to say that if the proposed scheme, or some scheme of the kind, came into force, he would be willing to give a donation to the library of 100 guineas. With regard to the question of raising the subscription, for his own part he felt that that was an absolutely necessary step to take. There was no doubt, however, he thought, that the financial aspect of the proposed changes needed consideration in greater detail; but subject to that he was disposed to give the report of the committee his best support.

Mr. Stannus then formally moved that the report be referred back with a view to the committee preparing a series of separate resolutions embodying the principles involved in their recommendations, and that that report should be submitted to an adjourned meeting, the opinion of the members being taken on the question in the meantime by means of circulars.

Mr. Bernard Dicksee seconded.

After some discussion, in the course of which it was objected that by the rules of the Association the course proposed by Mr. Stannus with regard to voting papers would be out of order,

The Chairman, who was appealed to to give his opinion as to the best course to be taken under the circumstances, said it was rather an invidious thing to ask him to give his opinion on the matter. The special committee had made their report on the questions referred to them as a whole; and the Committee of the Association had adopted it as a whole, and sent it down to the present meeting for consideration as a whole. He might say, however, that in committee, ten members of the thirteen who were present voted for sending it down as a whole.

Mr. Max Clarke thought it would be advisable to divide the report, as suggested by Mr. Stannus. If put to the meeting as a whole he thought it would be lost.

Mr. W. Burrell said he thought it would be hardly fair to the special committee to refer the whole question back to them after the time and care they had bestowed upon it.

Mr. H. O. Cresswell said he could not see what Mr. Stannus was to gain by persisting in his amendment. Supposing the report were to be divided under several heads, and supposing some of the divisions of the report were carried and others were lost, they would find themselves in a ridiculous position. Surely those members who objected to any particular portions of the report could move amendments directed against them. As to the question of raising the subscription, it was of no use to say that the Association had been successful hitherto on the half-guinea subscription. Even under the voluntary system the amount had not proved adequate to maintain the Association in a state of efficiency. He thought that it would be very undesirable to send round to the members to ask them to say whether they would pay half a guinea or a guinea per annum. Those who took no active part in the working of the Association would naturally vote for the smaller sum.

Mr. Slater said that as the hour was getting late he desired to make an appeal to Mr. Stannus. The points which Mr. Stannus had touched upon had already been very carefully considered by the special committee. It appeared to him that they had had that evening a very good general discussion upon the scheme as a whole; and as it was the view of the special committee and of the majority of the Committee of the Association that the report must be taken as a whole he thought the best way to proceed would be to adjourn the discussion, and he, therefore, asked Mr. Stannus to withdraw his amendment. If Mr. Stannus's objection was only to the proposal to increase the annual subscription it would be perfectly competent for him to move an amendment on that point.

Mr. Gotch supported Mr. Slater's appeal, for on consideration he thought that that would be the best course to adopt.

Mr. Stannus, however, declined to withdraw his amendment, but on the contrary urgently appealed to Mr. Slater to withdraw his motion, as persistence in attempting to carry the report *en bloc* would imperil the whole scheme.

Mr. C. H. Brodie moved the adjournment of the discussion.

Mr. Leverton seconded, and on a show of hands being taken the motion for the adjournment was carried.

The date to which the discussion was adjourned was not announced from the chair.

"INDUSTRIAL CONCILIATION."

"THE Position and Prospects of Industrial Conciliation," was the title of a paper read by Mr. L. L. Price, M.A., of Oriel College, Oxford, on Tuesday, the 20th inst., at the seventh ordinary meeting, for the present session, of the Royal Statistical Society, held at the Royal School of Mines in Jermyn-street, Sir Rawson W. Rawson, K.C.M.G., C.B., a past President of the society, in the chair.

The paper was, to some extent, a continuation of a previous paper read in December, 1886, in which the methods of preventing and adjusting industrial disputes in the iron and coal trades of the North of England had been described in detail. The writer commenced by alluding to the prominence of the subject at the present time, both in England and abroad. He pointed out that the continental *conseils de prud'hommes* did not as a matter of fact remove, and apparently were not intended to remove, all occasion for industrial quarrels. He then proceeded to notice the advantages which the prominence of the subject seemed to involve. In the first place the attention of the general public was directed to the question; and the conciliation scheme of the London Chamber of Commerce followed upon the London dock strike, while abroad, the International Labour Congress at Berlin was, to some extent at least, the result of the miners' strikes in Westphalia. In the second place, effective interest might be aroused in the history of past experiments, such as that of the Board of Conciliation and Arbitration on the manufactured iron trade of the North of England, which might, the writer held, be considered

as furnishing a crucial instance of the possibility of industrial conciliation; for the difficulties to be encountered in that trade were as serious as could well be conceived, and the Board had now been in successful working for more than twenty years. And, thirdly and lastly, some of the elementary principles of the subject were more likely at this than at other times to be generally understood. The necessity of effective representation of both parties, and the advantage of a trade union as supplying the means for such representation of the men were, the writer argued, gradually winning their way to recognition; and in this connexion the London dock strike presented some noteworthy features. But on the other hand there were disadvantages as well as advantages attaching to the present prominence of the question. The public were inclined to entertain extravagant expectations of the results to be achieved by industrial concilation, and to underrate the importance of the element of human nature, which was necessarily involved in the solution of the problem. The abandonment in 1887 of the sliding-scale, which formerly regulated wages in the Northumberland coal trade, was quoted as an illustration of the possibilities of failure of the most admirable and advanced scheme of industrial conciliation; and the recent history of that trade was examined at some length. From this history it appeared that the system of the sliding-scale was liable to break down in seasons of rapid and extensive fluctuations in prices, and also that the authority of trades union officials was not invariably secure from impeachment on the part of the general body of the members of their organisation. The writer concluded by urging that industrial conciliation should not be regarded as a panacea, but rather as an advantageous and reasonable alternative to strikes and lock-outs, which might commend itself to sensible men as a practical means of adjusting disputed questions with tolerable assurance of success.

In the interesting discussion that followed, Mr. Sydney Buxton, M.P., Mr. George Howell, M.P., Mr. C. M. Norwood, Mr. S. B. Boulton, Mr. W. H. Hey, and the Chairman took part.

ARCHITECTURAL SOCIETIES.

Birmingham Architectural Association.—At the final meeting of the present session of this Association, held on the 13th inst., the President declared that the following gentlemen had been elected to the various offices named for session 1890-91, viz.:—President, Mr. T. Naden; Vice-President, Mr. W. H. Lloyd; Hon. Treasurer, Mr. C. E. Bateman; Hon. Librarian, Mr. H. Beck; Hon. Secretary, Mr. H. R. Lloyd, A.R.I.B.A.; Hon. Auditors, Messrs. A. T. Powell, chartered accountant, and E. F. Titley. Council, consisting of four Members and three Associates, viz.:—Members: Messrs. W. H. Bidlake, M.A., A.R.I.B.A.; W. Doubleday; W. Hale, F.R.I.B.A.; and W. H. Kendrick. Associates: Messrs. F. B. Andrews, A.R.I.B.A., G. T. Bassett, A.R.I.B.A., and H. R. Bewlay. A hearty vote of thanks was passed to the President for the services he had rendered to the Association during the past session, and the thanks of the Association was also voted to the retiring officers. It was announced that the services of Professor R. H. Smith, M.I.M.E., Assoc.-M.I.C.E., had been secured as lecturer on Statics, and that a number of members had already given in their names for the lectures.

Manchester Society of Architects.—An exhibition was held on Friday, the 9th inst., at the meeting room of the Manchester Society of Architects (Diocesan Chambers) of the drawings and descriptive report of a tour, in Belgium and a portion of northern France, made by Mr. Th. E. Barker, A.R.I.B.A., who had been selected, in a preliminary competition, as the holder of the Society's Travelling Studentship for last year. The studentship, of the value of fifty guineas, was given on the condition of the holder submitting satisfactory proofs of work done during a tour of three months, and the Council of the Society, at a meeting held on February 20, passed a resolution expressive of their satisfaction with the result.

Association of Municipal and Sanitary Engineers and Surveyors.—A Lancashire and Cheshire District meeting of this Association is to be held at Burnley on Saturday next, May 31.

A NEW LIME.

SIR,—We are using a new patent lime (Ferguson's patent) in rebuilding the "Swiss Hotel," Old Compton-street, Soho, and as this is, to our knowledge, the first time that this lime has been practically used in this country, a few words of our experience concerning it may be of interest to the numerous readers of your paper.

We must confess that we are highly satisfied with the result, so far. The mortar made with this lime resembles in its properties more a Portland cement than a grey lime mortar, as it is very quick setting, becoming almost as hard as cement in a few days.

We made a very satisfactory concrete which, in spite of a heavy rain during the night, was hard enough next morning to build the foundations upon.

The usual proportion of lime to sand, however, is much too good for ordinary brickwork, and we find that one part lime to four parts sand makes perfectly satisfactory work.

The inventor says that the mortar will be in no way affected by frost, which, however, we had no opportunity of testing.

In plastering, which we shall begin shortly, the lime is said to give even better satisfaction, as it takes colour easier than common plaster or cement, and becomes dry enough to take paint or paper within three or four weeks.

Sold at the low value of ordinary grey lime, we should say that there is a large future in store for the lucky inventor, and we think it but right that publicity should be given to this invention, as in certain cases (as, for instance, where it is necessary to execute works with great rapidity) it will prove invaluable on account of its setting properties.

Any architect or builder interested in the subject can inspect the work done with this lime at the "Swiss Hotel," now in course of erection at 21, Old Compton-street, W.

WILLIAMS & HOPTON.

156, *Regent-street, W.*

*** In reply to an inquiry, our correspondents state that the lime or cement in question is obtained from Germany, and is not at present manufactured in England.

"ON THE PLANNING AND CONSTRUCTION OF HOSPITALS."

SIR,—In your notice of Mr. K. D. Young's paper on "Hospitals" you refer to the circular ones erected, but omit to mention that of the Hampstead Workhouse Infirmary, which was built from my designs in 1885, and illustrated by you the following year.

It is of interest in consequence of it being the largest on the circular system, and the first which received the approval of the Poor-Law Board, having seventy-five beds and nurses' quarters, and a diameter of 50 ft.

It has been fully occupied for nearly six years, and may, therefore, be considered as having stood the test of time, a desideratum desired by Mr. Young in his able paper. The medical and nursing staff at Hampstead speak of the building in the highest terms; and the ventilating system leaves nothing to be desired. My experience with both kinds of wards enables me to say that, in this most important particular, the circular ward is greatly superior. Unless this form of building had been adopted at Hampstead, a valuable site would have been useless for the much-needed extension of sick wards accommodation.—I remain, yours, &c.,

CHARLES BELL.

SIR,—In the interesting and valuable paper on this subject by Mr. Keith D. Young, F.R.I.B.A., as published in your columns I observe Mr. Young stating (as per page 359, first column) "There is, I think, very little doubt that in England the most suitable form of ventilation is the most simple. Opposite windows, assisted by the extracting power of open fire-places, supply all that is required, where properly handled, to keep the atmosphere sufficiently diluted."

Now, while I admit the value of good, simple ventilation, I think it is a mistake to credit the open fire-place with first-class value as an efficient "*extracting* power." My reason for saying so is that it is far too low, only about thirty inches or so above the floor. As the vitiated air exhaled from the lungs is heated to 97 deg., and the vitiated air from gas lights still higher, it follows that before this warm vitiated air can get up the chimney it has to be driven down somehow to the thirty-inch level. Now I would ask why there should not be provision made to carry off this warm vitiated air to the ceiling as it rises?

I respectfully think that provision for doing so should exist in a changeable climate like ours, quite independent of the windows, either by shafts or flues in the walls, or by sufficiently large pipes properly fitted in.

I write this after visiting a recently-erected hospital, and a large number of schools and churches, and watching the bad effect produced wherever there was deficient provision for carrying off the vitiated air at the top of the room.

At one school a good lesson was got as to not believing all you hear too readily. The headmaster and myself went into one school-room in which there were two female teachers; the window was open on the windward side, so I asked:—"Do you children not feel a draught from the window?" One of the girls immediately cried out, "No, sir." I remarked, "I fear that is not true." The Headmaster then said: "All you children who feel the air blowing in upon you hold up your hands." About thirty immediately did so! Then a set-to occurred between the teachers, one stating the cold draught from the window was often very disagreeable, the other, who was *out of the current*, felt nothing wrong. There will be more published in this relation shortly.

W. P. BUCHAN.

THE OLD NAVE, SOUTHWARK.

SIR,—Instead of the nave of Southwark being demolished, as said on page 340, in 1838, I can vouch for its being untouched in July, 1839, having never visited London till that month, and that being the first building I entered, little dreaming I was never to see it again. I believe there was no south porch; but in any case the west end, now proposed to be solid, had a central entrance and carved doors of later date than any other part, but of rich and unique design, delineated in Pugin's "Specimens," vol. ii., plate K*, described on page 9, where a note says, "See vol. v. of 'Architectural Antiquities,' by J. Britton, F.S.A., for ground-plan and five other plates of this church." I cannot find these, nor is Southwark in any of the indexes to that work.

E. L. GARRETT.

3, *Myddelton-square, E.C.*

PRICE-BOOKS.

SIR,—In your issue of May 3, I have read with considerable interest an excellent article on Messrs. Lockwood's, Laxton's, and Spon's new books on prices. With the whole of your remarks I cordially agree, and, moreover, I think no practical man would ever dream of consulting them as a guide in forming a correct estimate cost of work, and I am convinced that if any one took his ideas of prices from any yet-published book, and entered into competitive estimating, he would find himself completely out of it, as the greater portion of their prices are absurdly high, and not at all suitable to the present day, with its close-shaving and fierce competition.

What I would suggest is that one of the above-named firms should get a practical man,—a "tradesman,"—in each of the trades, to treat upon his ideas on the subject, assuming, of course, that he has also sound ideas *re* establishment expenses, wear and tear, depreciation of plant, &c., and I feel confident by so doing a far more valuable work could be brought before the public.

In my own case I could advise on one trade alone, but on that thoroughly, having served an apprenticeship to it in town, and since then have had six years' experience in an office as estimating clerk, bookkeeper, &c.; and in every trade there are numbers of such men who, it is reasonable to suppose, know their own individual trade better than any one man possibly can who attempts to lay down laws on all trades, and consequently cannot be a specialist in any one.

PRACTICAL.

"BOUNDARIES TO FOOTPATHS."

SIR,—The General Highways Act, 5 & 6 Will. IV., cap. 50, provides for cutting hedges by the side of carriageways but not footpaths. The presumption is that footpaths mostly crossed unenclosed land.

There are several cases that have been tried, and it is held that if a footway is fenced on either side, the person fencing is bound to maintain a good hard path, and, failing this, can be indicted. It is held that when a footpath is unfenced the public can walk on the adjoining land, but fencing prevents this. Since 1862, Highway Boards can authorise the fencing of footpaths.

I have no doubt an action could be brought against the owners of the hedges for obstructing the highway, and if the public broke through the hedge and trespassed on the adjoining land no conviction would follow.

The highway is "*between the fences thereof*," and if a wall or any other fence was built, the line would be the outside of the stem of the quick or briar at its contact with the earth.

The ditch is used jointly for the drainage of the land and road, and cannot be alienated.

ROBERT PHILLIPS,
County Surveyor.

CASE UNDER THE EMPLOYERS' LIABILITY ACT:

OLIVER *v.* GREENWOOD.

In the City of London Court, on the 16th inst., before Mr. Commissioner Kerr and a jury, the case of Oliver *v.* Greenwood was heard. The action was brought by John Oliver, carpenter and joiner, of 8, Manchester-road, Notting-hill, to recover 200*l.* in compensation for personal injuries he was alleged to have sustained through the negligence of the foreman of the defendant, Mr. James Greenwood, builder, of 86, Cannon-street, E.C.

Mr. Morton was counsel for the plaintiff and Mr. A. H. Ruegg for the defendant.

For the plaintiff, it was stated that the defendant was engaged in making structural alterations to two houses in Milton-street, City, which were being thrown into one. On Dec. 24 last, the plaintiff was in the defendant's service, and while at work an accident happened, which resulted very seriously for the plaintiff, as he was injured to such an extent that he was prevented from doing any work from then until the present time. A part of the work consisted of removing the party-wall, and to do this girders had to be employed. The plaintiff worked under the superintendence of a foreman named Fleming, and a deputy foreman named Edwards, by whom he was instructed to do some work on the ground floor. After dinner the foreman told a man named Deersley to commence drilling a hole in the wall on the second floor. To do this a ratchet-drill was employed. While the men were at work, Deersley, by some mistake, allowed the ratchet to slip. It fell on to a joist, and then bounded on to the plaintiff's head, hurting him very much. He was removed to St. Bartholomew's Hospital, and was afterwards sent home, where his private doctor attended him. It was asserted by the plaintiff that in the building trade it was a recognised custom to have either guard boards to prevent tools, &c., falling, or cloths to prevent any one being injured should anything fall. Had that been done, the accident would not have happened.

Evidence was given in support of the case, the doctor stating that it was impossible to fix the time how long the plaintiff might suffer.

For the defence, Mr. Ruegg admitted that the plaintiff had suffered injuries for which if he were entitled to anything he should be fairly and reasonably compensated. But the case for the defendant was that he was not liable for the sad occurrence. The customs of the building trade were at issue. It was not the habit of builders to provide guard boards or drop-cloths when work of this sort was being done. The man Deersley was working on a four-board scaffold, whereas men frequently worked on one board. No provision was necessary to avoid tools falling, as in the defendant's experience a rachet drill had never fallen in this way before. The defendant was, under the Employers' Liability Act, only responsible for the negligence of such men as had superintendence, which the man Deersley had not.

Mr. Commissioner Kerr summed up and the jury, after a short deliberation, found a verdict for the defendant.

Judgment, with costs, accordingly.

SEWERAGE AND DRAINAGE.

Cleethorpe.—The Cleethorpe Local Board have instructed Mr. W. H. Radford, C.E., Nottingham, to prepare plans and obtain tenders for carrying their Beaconthorpe outfall 150 yards farther out to sea, in consequence of the tidal increase of sand on the beach.

Wolston.—The *Leamington Courier* says that the Rugby Union Rural Sanitary Authority has called in Mr. J. E. Willcox, C.E., of Birmingham, to report and submit a scheme for the drainage of Wolston.

SCHOOL BUILDING NEWS.

Ashton-under-Lyne.—A mission school is to be built at Ashton-under-Lyne for the Methodist New Connexion, at a cost of about £1,500, from plans prepared by Mr. J. H. Burton, architect.

West Hartlepool.—The schools which the West Hartlepool School Board have been erecting in Oxford-street are now completed. They comprise a mixed school for 360 boys and girls and infants' school for 270. The former has an assembly-hall, 54 ft. by 30 ft.; five class-rooms, each 25 ft. 6 in. by 24 ft.; masters' room, 15 ft. by 12 ft.; and cloak-room, 30 ft. by 20 ft. The infants' school is 50 ft. by 24 ft., with two class-rooms, each 24 ft. by 20 ft.; marching hall, 44 ft. by 14 ft.; mistresses' room, 15 ft. by 12 ft.; and cloak-room, 24 ft. by 12 ft. There is also a caretaker's house, with six rooms, and there are play-sheds and latrines, approached by covered ways, to each department. The buildings are erected in brick covered with slate, the woodwork being of pitch-pine varnished. The playgrounds are paved with compressed concrete flags. The total cost has been about 4,200*l.*, including caretaker's house, or about 6*l.* a head for schools after deducting the cost of such house. The design selected in open competition was that of Mr. J. P. Pritchett, of Darlington, who has carried out the work with the assistance of Mr. Henderson, clerk of works, the contractor being Mr. Joseph Howe, of West Hartlepool.

The Student's Column.

ELECTRICITY, MAGNETISM, AND ELECTRICITY SUPPLY.—XXI.

COMMERCIAL UNITS.

ELECTRICITY SUPPLY is a phrase used, as a rule, to denote, not the supply of electricity, but the supply of work or energy by means of an electric current. When a building is being supplied from a central station, the extreme points in its circuit or circuits are joined one to each of the *two* mains belonging to the supply company. As many coulombs flow out from the building into the supply main, which is at the lower potential, as flow into the building out of that which is at the higher potential. The coulombs of electricity which flow out have lost potential, or capability of doing work, and it is the energy conveyed to the consumer in this way which constitutes an electricity supply. To put the same thing in other words, a current of electricity does not leave *electricity* behind it, but *work*.

The practical unit of energy, the joule (see article V.), is much too small for trade purposes; the Board of Trade have therefore fixed upon a commercial unit, which they define as follows:—"The expression 'unit' shall mean the energy contained in a current of one thousand amperes flowing under an electro-motive force of one volt during an hour." This unit is commonly spoken of as the Board of Trade unit, and written B.T.U. The B.T.U. is therefore equal to $1000 \times 1 \times 60 \times 60$, or $3{\cdot}6 \times 10^6$ joules.

The fact that a million joules can in certain districts be bought for about 2d. may give some idea of how relatively small an amount of energy it really represents. Before the joule was adopted as a unit, the B.T.U. was generally defined as 1,000 watt-hours; but unfortunately those who are incapable of distinguishing the difference between power and work have confused matters by defining the B.T.U. as 1,000 watts. The original definition, however, given by the Board of Trade can leave no doubt as to whether the B.T.U. is a measure of energy or of power.

Makers of dynamo-machines, finding the watt too small a unit of power in which to express the possible output from their plant, have adopted a unit equal to 1,000 watts. A 12-unit machine can, therefore, give an output of 12,000 watts, and we also immediately know that such a machine can in one hour deliver 12 B.T.U.'s. This new unit of power is also fairly convenient in its relation to horse-power, since 1 H.P.=746 watts, or 1 unit [of 1,000 watts]= 1·34 H.P. If, therefore, a machine is specified as of so many units, it follows that, allowing for the loss in the conversion of mechanical into electrical energy, it will take about $1\frac{1}{2}$ times that quantity of horse-power to drive it; a 12-unit machine must receive 18 H.P., actual, in order that it may work to its full capacity.

The unit of quantity employed in connexion with secondary cells is the ampere-hour, that is, the number of coulumbs carried past any point in a circuit by an ampere flowing for an hour. The ampere-hour is, therefore, equal to $1 \times 60 \times 60$, or 3,600 coulombs.

Makers commonly state the capacity of a cell in horse-power-hours, though the word hours is usually omitted. A "1-horse-power cell" means a cell that, under normal working conditions, stores an amount of energy equal to that delivered by one horse-power in one hour. Taking the discharging E.M.F. as 2 volts, such a cell will give $\frac{746}{2} = 373$ ampere-hours.

If a secondary battery be charged and discharged with care, it will be found that the ampere hours of discharge very nearly equal those of charge, and on these grounds it is sometimes stated that the efficiency of a cell may be very near 100 per cent.; but it must be pointed out that a secondary cell is required to store energy. The difference of potential between the terminals is about 2·5 when being charged, and 2 when being discharged under ordinary conditions: hence, even if no loss of ampere-hours took place at all, only 80 per cent. of the energy used in charging would be returned. In point of fact it is considerably less than this, though no exact figures can be given, as the true efficiency varies considerably with the nature of the work a battery is called upon to do.

The number of watts required to drive a given current through a conductor of known resistance can be at once calculated (see article V.); the work thus used reappears as heat, and causes the temperature of the conductor to rise.

If J = number of joules, h = number of units of heat* produced:—

$$h = 0{\cdot}24\,J.$$

MAINS.

In small installations of electric light or power plant, the loss of power, not the rise of temperature, which takes place in the conductors, is a very serious matter; but when long distances have to be traversed, or large currents carried, the question of the size of the conductors or mains can no longer be overlooked.

Loss of power involves merely the question of cost. When the conditions under which power will be produced are known, the cost can be calculated. Interest on capital outlay and depreciation are the items in the annual cost of a cable; to these, however, must be added the annual cost of the work done in getting the current through the cable. The larger the cable, the smaller the latter cost, but the greater the two former items; a medium course should therefore be taken to make the sum of the two a minimum. The mathematical solution of the problem was given by Sir William Thomson in 1881.

The rise of temperature permissible in a main is limited by the temperature to which it can be raised without injury to the materials of which it is constructed. This question was investigated mathematically in a very complete manner by Professor George Forbes, in a paper read by him before the Society of Telegraph Engineers in 1884, to determine what section the conductor of a main or cable should have to prevent overheating with any given current.

If in a cable the permissible loss of power per mile is proportional to the current, formulae already given show that if the current increases the cross-section of the cable must increase in the same ratio, or if D be the diameter of the cable, since the cross-section varies as D^2 then, $D \propto C$ a very simple relation. Passing on, however, to the consideration of how the rise of temperature, T, varies with C and D—let R be the resistance of, say a mile of the cable, if h = the quantity of heat produced, we know that:—

$$h \propto C^2 R \propto \frac{C^2}{D^2}$$

$$\text{or} \qquad h = p\,\frac{C^2}{D^2} \text{ when } p \text{ is some constant.}$$

Again, the quantity of heat which passes out varies as the product of the area of the surface of the cable from which it can escape and the temperature of the surface. But in the case of a circular cable the surface is proportioned to D, hence

$$h \propto T D$$

$$\text{or} \qquad = q\,T\,D \text{ when } q \text{ is some constant.}$$

The value of h in both cases is the same, because when the cable is at the highest temperature the current can produce, as much heat must escape from the cable as is generated in it, or the temperature would continue to rise; therefore

$$q\,T\,D = p\,\frac{C^2}{D^2}$$

The value of T, however, must be the same for all sizes of cables when this value, the highest allowable, has been decided upon. We then have

$$\frac{C^2}{D^3} = \frac{p}{q}\,T \text{ a constant.}$$

$$\therefore D \propto C^{\frac{2}{3}}.$$

This expression shows that with a cable of circular section, the weight of conductor per mile is proportional to the fourth power of the

* The unit of heat is the quantity required to raise one gramme of water, at its maximum density, 1 deg. centigrade.

cube root of the current; so that, to take an extreme case, if the current is increased a thousandfold, the weight, and consequent cost of conductor, will increase ten thousandfold; that is, the conductor must be ten times as large as it would have to be on the score of loss of power alone. The difficulty, however, is more apparent than real: either a number of conductors may be used, or a single conductor shaped so as to present a vastly increased cooling surface; by either of these means, then, may the excessive temperature in large cables be reduced without increasing the area of cross section abnormally.

Books.

Schliemann's Ausgrabungen in Troja, Tiryns, Mykenä, Orchomenos, Ithaka, im Lichte der heutigen Wissenschaft. Dr. CARL SCHUCHARDT, mit 2 Porträts, 6 Karten, und Plänen, und 290 Abbildungen. Leipzig: Brockhaus. 1890.

THE results of Dr. Schliemann's excavations have always been given with remarkable promptness to the archæological world. In no direction has his marvellous business capacity been more strikingly shown than by the readiness and completeness with which huge volumes like "Troja," "Ilios," "Mycenæ" have been put through the press. Spite of this, there are no excavations as to the net result of which for science it is so difficult for the ordinary student to form a distinct idea. Dr. Schliemann's books are, as is well known, loaded with personal and (for science) irrelevant detail, they are further vitiated by much erroneous theory. To make satisfactory use of them, a student had need be a trained specialist in prehistoric art. There was great need for Dr. Schuchardt's book, and this need it admirably fills. It is not saying too much to state that the student has now before him the whole results of Dr. Schliemann's various work so far as yet attained by science; he has it, moreover, in a book clearly arranged and admirably lucid in style, and abundantly illustrated with plans and cuts, taken not only from Dr. Schliemann's books but also from recent publications in the Πρακτικά and other periodicals not usually at hand for the student. Probably a work so admirable will not go long untranslated into English. Dr. Schuchardt notes in his preface,—as, indeed, is well known to all,—that it is in England especially that Dr. Schliemann's merits have been most conspicuously recognised, and in England, surely, such a book will be widely circulated.

A Handbook on Investments in Houses and Land. By R. DENNY URLIN, Barrister-at-Law. London: Effingham Wilson. 1890.

THIS is a sensible book, which will give a layman a general idea of the legal steps required in order to carry through a purchase or a loan, though, of course, it cannot supersede the need for legal assistance. It also contains many little hints and bits of information of a practical kind, such as those on the advantage of the septennial system of fire insurance. There is also a short chapter on property in Ireland, which would have been better omitted. It does not attempt—as, indeed, would be impossible—to describe the Irish law of property in five pages. It contains odds and ends of statements of no particular force or use: "The purchase of land in Ireland is very legitimate as a speculation, but it should be entered upon with a full knowledge of facts." This oracular utterance is so much waste paper.

Die Altischen Grab-reliefs. Erste Lieferung. Textbogen 1-2. Tafel i.-xxv. Berlin: Spemann. 1890.

THE first issue of the long-expected corpus of Greek grave-reliefs, undertaken by the German Archæological Institute, is now before us, and comprises forty-one reliefs, complete and fragmentary, all dated before the Persian war. The series opens with the beautiful and, to professionals, familiar stele of Lyseas,—a model of exact coloured reproduction. The publishers of the corpus act indeed wisely in sparing no cost to facsimile these coloured stelæ, the tints from which are fast fading. In the present instance it is only by standing at a particular angle to the stele that the remaining colour can be at all adequately seen. The stele of Lyseas is followed by that of Aristion, long the only known sample of this sort of work, but now, we believe, for the first time reproduced in colour. Side by side with it is the analogous stele, recently found by the American excavators at Dionyso. But few of the series are here published for the first time, but the superiority of the plates over all previous attempts at reproduction will amply atone in the eyes of the intending purchaser. The text is brief and to the point. It rightly confines itself to a precise statement as to provenance, dimensions, and present state of preservation, and full bibliography. The price of the first issue is 3*l.*, but no hint is given, and perhaps none could be, of the ultimate cost of the complete work.

Die Antiken Sarcophag-Reliefs im Auftrage des Kaiserlich deutschen archäologischen Instituts, mit Benutzung der Vorarbeiten von Friedrich Matz, herausgegeben und bearbeitet von Carl Robert. Zweiter Band. Mythologische Cyklen. Berlin: G. Grote'sche Verlagsbuchhandlung. 1890.

SIDE by side with the "Attic grave reliefs," noted above, appears the first instalment of the corpus of Greek and Roman sarcophagoi, with text by Dr. Robert. The number first published is in reality the second volume of the complete series. It deals with certain *cycles* of mythological subjects, *i.e.*, with the Trojan, Argonautic, and Theban sets of myths. The remaining volumes are to deal with isolated myths, Bacchic and Erotic scenes, and subjects purely decorative. All general considerations are reserved for the issue of the first volume, and hence any detailed criticism of the text would at present be premature. As regards these plates, it may be noted that quite special difficulties have had to be overcome. Very few of the sarcophagoi were sufficiently well preserved to be photographed direct in most cases; they have had to be drawn by a skilled artist, and the drawing supervised by a trained archæologist. To this difficulty has been added another. Many of the sarcophagoi are to be found walled into halls and courtyards at a great height. Due inspection could only be carried on by the erection of platforms and scaffoldings. This will give some idea of the magnitude of the task undertaken by the editors and publishers,—a task in which they have everywhere, they own, met with the most real help from directors of museums and owners of private palaces and collections. Further, in the case of sarcophagoi that have been known to exist, but have since disappeared, old publications have had to be collated, and a selection reproduced. A most useful portion of the book is a list of the original MS. drawings that have been laid under contribution. These include the remains of the collection of Cassiano del Vozzo, which later in 1672 passed into Cardinal Albani's possession, and (acquired by George III.) are now most of them in Windsor Castle. Of the great importance of the work in relation to the study both of mythology and art, it will be best to postpone all mention till the issue of vol. I. Meanwhile, we may call attention to the admirable indexes topographical, provenance, and chronological. The dates of discovery vary from 1488-1889.

The Architects', Surveyors', and Engineers' Compendium, and Complete Catalogue. Edited by JOHN EDWARD SEARS, F.R.I.B.A. London: The Compendium Publishing Company, 16, New Bridge-street. 1890.

THIS issue of Mr. Sears's "Compendium" takes a somewhat different form to that of the three previous annual issues, and includes several new and useful features. It is, of course, largely composed of advertisement pages, and the building materials or appliances to which they relate are classified into several groups; but we are bound to say that not one of these groups is a "complete catalogue" in itself, and therefore the claim of the work as a whole to that designation is a trifle exaggerated. The publishers have no doubt brought together as many pages of advertisements as they could get, and on the whole they are fairly representative; but although the present volume is sufficiently bulky (it extends to nearly 700 pages), it would require a far bulkier tome to contain the advertisements of all the inventors, manufacturers, and merchants who appeal to the building trade. To quote only one or two examples, in Section A of the so-called "Complete Catalogue," devoted to "Bricks, Tiles, and Terra-Cotta," several well-known firms are not mentioned. The same remark applies to Section D, "Engineering and Fireproof Construction," Section L, "Sanitary Manufactures," and other sections which we might instance. Nevertheless, a very large number of illustrated trade advertisements are here brought together and classified in a way that cannot but be found very useful to architects, surveyors, and builders. A few illustrations of modern architecture at home and abroad are included, but these will not be so useful as the "Price-Book," compiled by Mr. Henry Lovegrove; the Notes on Acts of Parliament and Legal Decisions of the past year, compiled by Mr. John Warburton, solicitor; and a great deal of other matter, for the reliability of the whole of which, however, we cannot vouch. The work is not free from mistakes both in editing and printing. For example, under the first head we find the leading and only really representative architectural body of the United Kingdom three times in succession spoken of as "the Royal *Institution* of British Architects." Under the second head, in the list of "builders nominated by architects," the name of the well-known firm of Cubitt & Co. is rendered "*Cubbitt* & Co." But notwithstanding these criticisms, the work has been very well produced on the whole.

RECENT PATENTS.

ABSTRACTS OF SPECIFICATIONS.

5,989, Fanlights. T. P. Graham.

This invention relates to a device for securing, at any angle doors, fanlights, &c. A semi-circular ratchet, with a stop or pin, is fixed in such a way that the teeth of the ratchet, engaging in the stop, fix the fanlight, &c., at any desired angle.

6,433, Building Material. W. Schleuning.

According to this invention, the residue of soda manufacture or soda gypsum is used, with lime and gypsum in suitable proportions (or chemically treated with sulphates to increase the hardness). The result is a substance which is stated to be particularly useful for building purposes.

9,045, Window-sash Fastener. G. F. Belling.

This invention consists of a small plate screwed to the outer sash. To this plate is attached by an upright pin a cross piece, which is of a shape that when the sashes are closed, and the piece brought into position, it draws the sashes together, and locks into plate and pin on the inner sash, preventing it from being opened by anything passed or forced up between the sashes.

9,479, Hasp Locks. J. Bates.

According to this invention, two additional or supplementary bolts are controlled by springs, and pass into the staples, giving an additional security. These two bolts are placed so wide apart that an eye or loop may be used with the lock for fastening it by a padlock, should the bolt be inoperative.

19,548, Door Knobs. R. H. Rastrick.

The attachment between the handle and the shaft or bar is obtained, according to this invention, by means of a spiral spring tightly wound around the spindle, and acting as a grip or screw. The knobs can only be removed when one end of the spiral is raised from its seat, and the fastening may be adapted to a variety of uses.

NEW APPLICATIONS FOR PATENTS.

May 5.—6,904, G. Martin, Glazing Sash-lights and Sky-lights.—6,914, T. Fawcett, Machinery for Making and Pressing Bricks.—6,918, G. Deacon, Strips or Bars for Glazing.—6,922, E. Whitehead, Sash-fasteners or Holders.—6,950, M. Rodger, Ventilators.

May 6.—6,952, C. Kellner, Coating Iron, Steel, or other Metals with Portland Cement, &c.—6,953, J. Sankey, Butt Hinges.—6,999, W. Lancaster, Level.—7,023, A. Rosewater, Automatic Flushing-tanks.—7,025, J. Jones, Safety Appliances for Windows.

May 7.—7,074, A. Wilson, Bolts for Doors.—7,079, J. Mason, Door Springs and Checks.—7,099, B. McTear, Kilns for Burning Bricks, &c.—7,106, J. Bayley, Folding Doors.—7,107, J. Bayley, Paving-blocks.

May 8.—7,153, W. Stock, Syphon-cisterns.—7,160, W. Peace, Chimney Cowl.—7,174, E. Pearson, T-squares, &c.—7,184, C. Edwards, Drain-pipes, Gas-retorts, &c.

May 9.—7,215, D. Allport, Foundation for Light Buildings, &c.—7,225, T. Baker, Electric Bell Pushes.

May 10.—7,294, W. Thompson, Mortising and Boring Machines.—7,306, J. Boulstead, Paint-brushes, &c.—7,312, E. Baudry-Diot, Bridges.—7,318, J. Bailey, Drainage and Sewage.

PROVISIONAL SPECIFICATIONS ACCEPTED.

3,075, G. Light, Intercepting Traps for Drains.—4,458, G. Le Maistre, Sliding Sash Window.—4,608, C. Longley, Wood-block Flooring.—4,712, H. Doulton, Construction of Sewers.—4,738, S. Haslam, Window Sash and Frame.—4,740, W. White, Sliding Sashes of Windows. 5,121, J. Eing and J. Kelly, Flushing Apparatus for Water-

closets.—5,161, J. Gillespie, Water-closets.—5,363, L. Chambaz and L. Schmid fils, Sash Fasteners.—5,459, W. Mears and others, Water-waste Preventers.—5,572, W. Millington, Boiler for Fireplaces or Stoves.—5,899, T. Robinson, Wood Planing and Moulding Machines.—6,088, E. Brook, Kilns.—6,413, W. Junge, Saws.—6,461, W. Jones, Chimney Cowl.

COMPLETE SPECIFICATIONS ACCEPTED.

Open to Opposition for Two Months.

10,237, J. Deeley, Syphon Flushing Cisterns.—10,463, W. Douslin, Door Fastener or Cupboard Turn.—19,524, S. Empsall and W. Fish, Syphon Water Flusher.—3,776, W. Ingram, Sash Fastener.—4,323, C. Hanneborg, Machines for Making and Laying Drains.

RECENT SALES OF PROPERTY:

ESTATE EXCHANGE REPORT.

May 8.—By GLASIER & SONS (at Brighton).

Southwick—F. cottage and oyster beds	£290
20 to 24, Adur-ter., f., r. £70	980
Four plots of land, near the Station and garden land	330
Southwick-green—Three plots of f. land	680
Thirteen plots of f. land, 35a. 3r. 16p.	4,380
"Southwick Farm" and 49a. 3r. 11p., f.	5,400
Several freehold houses, shops, and cottages	1,420

May 12.—By G. A. WILKINSON & SON.

Regent's Pk.—L.g.r. of £52. 10s. g.r. £10 p.a., u.t. 35 yrs.	720
L.g.r. of £94, g.r. £20, u.t. 30 yrs.	1,230
Kensington—L.g.r. of £75. 10s., g.r. £23, u.t. 32 yrs	1,090
Islington—L.g.r. of £92, g.r. £23. u.t. 28 yrs	870
Euston-rd.—L.g.r. of £52. 1s. g.r. £22. 1s., u.t. 16 yrs.	280
Lisson-grove—L.g.r. of £138, g.r. £49, u.t. 25 yrs.	1,060
L.g.r. of £10. 10s, Peppercorn, u.t. 25 yrs.	130
Dorset-sq.—L.g.r. of £20. 2s. Peppercorn, u.t. 11 yrs	125
Park-lane—10, Norfolk-st., u.t. 13 yrs., g.r. £100, r. £200 p.a.	750

By WEATHERALL & GREEN.

Rotherhithe—28 to 33, Maynard-rd., u.t. 38 yrs., g.r. £14. 10s	885
Kensington—1 and 4, Catherine-ter., u.t. 14 yrs., g.r. £6. 9s., r. £65	340
Wimbledon—Dundonald-rd., a plot of freehold land	80

By ROBINSON & FISHER.

Regent-st.—Nos. 95, 97, 97a, and 97b, u.t. 29 yrs., g.r. £156. 7s. 3d.	8,200
10 and 11, Swallow-st., u.t. 29 yrs., no g.r.	1,710
12 and 13, Swallow-st., u.t. 29 yrs., no g.r.	1,980
No. 215, Regent-st., u.t. 30 yrs., g.r. £37. 15s., r. £350	5,250
Regent's Pk.—4, Cornwall-ter., u.t. 30 yrs., g.r. £60, r. £240	1,700

By W. H. KEER.

Shoreditch—101, Curtain-rd., f., r. £90 p.a.	1,800

By HIGGINS & SON.

St. John's Wood—94 and 96, High-st., u.t. 11 yrs., g.r. £7. 10s.	310
South Hampstead—1, Boundary-mews, u.t. 46 yrs., g. r. £4	190

By M. MILES.

Edmonton—"The Angel Inn," and eight cottages, u.t. 40 yrs., g.r £100	1,560
Lewisham—49 and 51, Courthill-rd., f.	665

By Mr. MONK.

Leatherhead—"The Royal Oak" public-house, f., r. £65 p.a.	2,300

May 13.—By A. H. TURNER & CO.

Nutfield—F. land, 20 acres	3,100

By P. D. TUCKETT.

Oxford-st.—43, Tottenham-ct.-rd., c., r. £125 p.a.	2,400

By G. BISHOP.

Camberwell—36, Shenley-rd., u.t. 87 yrs., g.r. £6. 15s., r. £36	320

By WALKER & RUNTZ.

Islington—41, Ockendon-rd., u.t. 51 yrs., g.r. £5. 5s., r. £34	335
New North-rd.—19, Hale-st., u.t. 37 yrs., g.r. £5. 5s., r. £30	250
West Hackney—16, Church-rd., u.t. 70 yrs., g.r. £6. 6s.	250

By DEBENHAM, TEWSON, & CO.

Strand, Milford-lane—"Milford House," f., r. £400	10,000
Hackney, Priory-pl.—F.g.r. of £12. 10s. p.a. with reversion in 86 yrs.	225

DRIVER & CO.

Burton Stoke, Wilts—"The Purton Mineral Spa," and 4a. 1r. 20p., f.	950
Caterham—The f. residence "Wellesley"	1,800

By BATTAM & CO.

Lee—Nos. 2 and 4, Leyland-rd., u.t. 74 yrs., g.r. £2	1,150

May 14.—By CHINNOCK, GALSWORTHY, & CO.

Notting Hill, High-st.—F.g.r. of £300 p.a., with reversion in 76 yrs.	8,840
Kensington, Sheffield-ter.—F.g.r. of £20, with reversion in 75 yrs.	710
Church-st.—F.g.r. of £45, with reversion in 16 yrs.	1,210
Notting Hill—6a and 7a, High-row, f., r. £85	1,400
Fulham-rd.—F.g.r. of £60, with reversion in 76 yrs.	1,800
Redcliffe-gardens—F.g.r. of £60, with reversion in 76 yrs.	1,925
Kensington, Palace Gardens-ter.—L.g.r. of £102 p.a., u.t. 63 yrs.	2,390
Strathmore-gardens—L.g.r. of £73 p.a., u.t. 63 yrs.	1,670

By MADDOX & SON.

South Hampstead—172, Adelaide-rd., u.t. 62 yrs., g.r. £14. 14s.	600

By INMAN SHARP, HARRINGTON, & ROBERTS.

Camden-rd.—9, Rochester-ter., u.t. 54 yrs., g.r. £6, r. £65	460
14, Rochester-ter., u.t. 54 yrs., g.r. £6, r. £52. 10s.	£380
34, St. Augustine's-rd., u.t. 60 yrs., g.r. £6, r. £43	340
Marylebone—98, Wigmore-st., the lease of, u.t. 13 yrs.	610

F. PIGGOTT (at Richmond).

Richmond—41, 41a, 42, and 43, George-st., c., r. £389	9,000
33, Worple Way, c.	85
George-st., c., g.r. £15, u.t. 18 yrs.	500
5, Victoria-pl., c.	95
27, The Green, c., r. £35	700
1 and 2, King-st., c., r. £90	6,850
Feather's-yd.—C. stabling, workshops, &c., r. £99. 8s.	1,650
Water-lane—Two c. cottages, r. £72. 16s.	1,095
"The Waterman's Arms," c. r. £35	760
Charlotte-pl.—F.g.r. of £11, with reversion in 42 yrs.	405
Twickenham, Heath-rd—F.g.r. of £25, with reversion in 16 yrs.	810
Brentford—142, High-st., f., r. £22 p.a.	320

May 15.—By H. STACEY.

Wethersfield, Essex—"Spicer's Farm," and 36a. 3r. 16p., f., r. £59	850
South Norwood—2, Acacia-villas, u.t. 73 yrs., g.r. £6	380
Brixton—32 to 42 (even), Talma-rd., u.t. 82 yrs., g.r. £12, r. £203. 4s.	1,900

By F. HARDS & BRADLEY.

Westcombe Pk., Ulundi-rd.—"Alpha House," f.	1,070
Notting Hill—5, St. Charles'-sq., u.t. 83 yrs., g.r. £11, r. £50	300

By L. G. LEWIS.

Hackney—An l.g.r. of £142, g.r. £120, u.t. 2½ yrs., and the lease of 79 to 109 (odd), Mare-st., and 1 to 22, Essex-st., u.t. 2 yrs., r. £164. 15s.	245
Hoxton—19 to 22, Great James-st., u.t. 3½ yrs., g.r. £10. 15s., r. £104	110
Commercial-rd—2, 4, & 6, Blackesley-st, u.t. 7½ yrs., g.r. £9	180
56 and 82, Anthony-st—u.t. 10½ yrs., g.r. £7. 3s., r. £62. 8s.	145
48 and 60, Star-st., u.t. 11 yrs., g.r. £4. 17s. 6d., r. £40. 6s.	55
36, Morris-st., u.t. 10½ yrs. g.r. £3. 7s. 6d	35
Wembley-hill—F. house and shop, r. £21	50
Brasted Chart, Kent—A plot of f. land	25

By GEO. GOULDSMITH, SON & CO.

Belgravia—30, Lowndes-sq., u.t. 38 yrs., g.r. £5.	4,000
182, Sloane-sq., u.t. 46 yrs., r. £165	1,700
Dorset-sq.—15, Balcombe-st., u.t. 19 yrs., g.r. £12. 10s., r. £70	385

By HERRING, SON, & DAW.

Brixton—2 and 4, Gresham-rd., u.t. 71 yrs., g.r. £10, r. £92	1,020
Streatham, Rydal-rd.—F. house "Grasmere," r. £65 p.a.	910

By H. J. BLISS & SONS.

Bethnal-green—14 to 17, Clare-st., u.t. 14 yrs., g.r. £10	90
Commercial-rd.—47 to 53 (odd), Star-st., u.t. 11 yrs., g.r. £10	75

By E. STIMSON.

Walworth—321 and 323, East-st., f., r. £126 p.a.	1,010
7, 8, and 9, Cyril-st., u.t. 42 yrs., g.r. £9. 10s., r. £75. 8s.	555
Peckham—15 and 17, Talfourd-st., f., r. £85	990
45, 47, 49, 53, and 55, Talfourd-st., f., r. £160 p.a.	2,250
Camberwell—240, 242, and 244, Albany-rd., f., r. £109. 4s.	1,015
248, Albany-rd., f., r. £31. 4s.	300
Peckham—132, Cator-st., u.t. 55 yrs., g.r. £3. 10s., r. £26	150

By NEWBON & HARDING.

Homerton—8 to 16 (even), Brooksby's-walk, u.t. 57 yrs., g.r. £20	740
Clerkenwell—40, Myddleton-st., u.t. 12 yrs., g.r. £8, r. £36	115
Islington—76 and 78, St. Peter-st., u.t. 46 yrs., g.r. £12, r. £80	685
Camden-rd.—13, Clifton-rd., u.t. 60 yrs., g.r. £8, r. £48	475
Crouch-hill—38, Trinder-st., u.t. 86 yrs., g.r. £6. 6s., r. £36	365
Highbury—9, 11, 13, and 15, Lucerne-rd., u.t. 91 yrs., g.r. £30	1,480
68, Aubert-pk., u.t. 86 yrs., g.r. £7, r. £40	335
Holloway—15, Pemberton-rd., u.t. 61 yrs., g.r. 5s.	1,105
Canonbury—19, St. Paul's-rd., u.t. 56 yrs., g.r. £7, r. £50	410
Kingsland—29, Colveston-cres., u.t. 66 yrs., g.r. £7. 10s., r. £48	360
Walworth—66, Carter-st., u.t. 55 yrs., g.r. £5, r. £36	365
Peckham—48, James-grove, u.t. 36 yrs., g.r. £4, r. £31. 10s.	175
Highbury—44, Drayton-park, f., r. £60	760
Clapton—F.g.r. of £35. 8s., with reversion in 76 yrs.	80

By D. WATNEY & SONS.

Crystal Palace-pk.-rd.—"The Oaks," u.t. yrs., g.r. £11	1,100
Isleworth, Spring-grove—"Clyde House," u.t. 63 yrs., g.r., £15, r. £70	760
Lower Clapton—131, 133, and 135, Glenarm-rd., f., r. £93. 8s.	900
26 to 32 (even), Dunlace-rd., f., r. £131 p.a.	1,460
119, 121, and 123, Powerscroft-rd., F.	800
Leyton—1 to 6, Phœnix-ter., f.	860

May 16.—By A. & A. FIELD.

City of London—11, Artillery-lane, f., r., £50 p.a.	800
Edmonton—4, Hyde Side-ter., u.t. 76 yrs., g.r. £7. 10s., r. £26	205

By H. STAINES.

Bow—138 to 144 (even), Antill-rd., u.t. 72 yrs., g.r. £20, r. £143	1,145
Bethnal-green—15, Thoydon-rd., u.t. 29 yrs., g.r. £4. 10s., r. £35. 2s.	255
2 and 3, Chester-st., u.t. 21 yrs., g.r. £6, r. £45. 10s.	190

By J. M. KLENCK & CO.

Stratford—39, Gurney-rd., f.r. £24	300

By WEATHERALL & GREEN.

Regent-st.—Nos. 292 and 294, u.t. 32 yrs., g.r. £61. 15s., r. £630	11,100
Chelsea—25 and 26, Tadema-rd., u.t. 91 yrs., g.r. £14, r. £76 p.a.	£520

By Messrs. VENTOM, BULL, & COOPER.

Chiswick, High-rd.—"Merton Lodge," f., r. £130	3,550
Chelsea—1, Marlborough-rd., u.t. 12 yrs., g.r. £3, r. £29. 10s.	150
Upper Baker-st.—47, Pk-st., u.t. 9½ yrs., g.r. £7. 7s.	200

By FIELD & SONS.

Bermondsey—29 and 31, Jamaica-rd., f., r. £58	760
Pimlico—23, 29, and 41, High-st., u.t. 36 yrs., g.r. £24, r. £155	1,270

By F. WEST.

Acton-green—85, Antrobus-rd., and two plots of land, f.	600

[*Contractions used in these lists.*—F.g.r. for freehold ground-rent; l.g.r. for leasehold ground-rent; i.g.r. for improved ground-rent; g.r. for ground-rent; r. for rent; f. for freehold; c. for copyhold; l. for leasehold; e.r. for estimated rental; u.t. for unexpired term; p.a. for per annum; yrs. for years; st. for street; rd. for road; sq. for square; pl. for place; ter. for terrace; cres. for crescent; yd. for yard, &c.]

MEETINGS.

SATURDAY, MAY 24.

Architectural Association.—Visit to the *Field* and *Queen* new printing offices, Bream's-buildings, Chancery-lane. 3 p.m.

Royal Institution.—Dr. Charles Waldstein on "Recent Excavations in Greece." III. 3 p.m.

Association of Public Sanitary Inspectors.—Fifth Annual Provincial meeting, to be held at Leamington, when the President, Sir Edwin Chadwick, K.C.B., will deliver an address.

Edinburgh Architectural Association.—Visit to Bridge Castle and Torphichen Church.

THURSDAY, MAY 29.

Royal Institution.—Professor Dewar, M.A., F.R.S., on "Flame and Explosives." IV. 3 p.m.

Edinburgh Architectural Association.—President's Closing Address. 8 p.m.

FRIDAY, MAY 30.

Architectural Association.—Adjourned special business. Meeting, 7.30 p.m.

Royal Institution.—Mr. A. A. Common, F.R.S., on "Astronomical Telescopes." 9 p.m.

SATURDAY, MAY 31.

Association of Municipal and Sanitary Engineers and Surveyors.—Lancashire and Cheshire District Meeting, to be held at Burnley.

Edinburgh Architectural Association.—Annual Excursion to Dunfermline, Inverkeithing, &c.

A New Convalescent Home at St. Leonards-on-Sea, in connection with the Chelsea Hospital for Women, Fulham-road, is now in course of erection. The site is at the western end of the Marina, St. Leonards, on the cliff, about 100 ft. above sea-level. It has a direct southern aspect, and very extensive sea and land views. The Home is approached from the road on the sea front by a main road leading from West St. Leonards to Hastings. It is within three minutes' walk of the West Marina (Brighton and South Coast Railway) and the West St. Leonards (South-Eastern Railway) Stations. The building will be faced with red bricks, with Bath stone dressings and red tile hanging, and the roof will be covered with brindled tiles. The internal joiner's work of the main building will be executed in pitch pine and varnished. The main building, which will be two stories high, will contain the following accommodation:—Ground floor: day-room, reading room, dining room, waiting room, matron's room and office, lavatories and water-closets, kitchen, scullery, larders, stores, &c., and servants' hall. First floor: patients' bedroom, Matron's and nurses' bedrooms, and bath rooms, water-closets, &c. There will also be an attic floor for servants' bedrooms, box-rooms, &c. A corridor, 8 ft. wide, will run through the main building on ground and first floors from east to west, so that a current of fresh air can always be obtained through the building. A verandah, where the patients can sit and enjoy the sea breeze under shelter in wet weather or hot sunny days, will extend along the whole of the south front, and the day-room will have a door opening on to the same. The whole of the drains will be laid outside the building. The wastes from sinks, lavatories, baths, &c., will be entirely disconnected, and the soil pipes will have ventilation shafts with fresh-air inlets. Mr. Frank H. Humphreys, of Hastings, is the architect. The contract, which was submitted to tender, was secured by Messrs. Eldridge & Cruttenden, of St. Leonards-on-Sea. We are asked to point out that as the erection of this convalescent home will add very considerably to the financial responsibilities of the Board of Management, they earnestly beg for special annual subscriptions to help to maintain the Home in a state of efficiency, and for donations to the Furnishing Fund. Any donations or subscriptions will be thankfully received by Mr. Henry E. Wright, the Hon. Treasurer.

Miscellanea.

Properties for Sale.—(1) "The Chimes," standing in nearly two acres of ground, in West End-lane, West Hampstead. This conspicuous house was designed by the late Edward Pugin, architect, for the late E. R. Herbert, R.A., who named it after one of Dickens's Christmas story-books. So rapidly has this once rural by-way changed its character that the only vacant land on either side is the ground attached to this residence. (2) By auction in Edinburgh, at an upset price of 15,000*l.*, the Underwood and Raggiewhat estates, of about 450 acres, in Dryfesdale parish, Dumfriesshire. Dryfesdale lies in the Annandale district, watered by the Annan and Dryfe. It has remains of Roman and Celtic camps; at the former of which Agricola encountered the forces of Corbred II. (Galdus) in A.D. 79. In Lockerbie is the ancient fastness of the Johnstones of that ilk, whose great contest with the Maxwells, on December 7, 1593, is commemorated by the "Maxwell's Thorns," with a tumulus at their base, about half-a-mile distant from the old churchyard. (3) Horton Manor house, Epsom, virtually rebuilt after the late Sir G. G. Scott's designs, together with 1,060 acres, including a home-park and farm, four other farms, several homesteads, &c.; and also, in lots, the Nork Park estate, lying near to the Banstead and Epsom Downs, and stretching over some 2,430 acres.

The English Iron Trade.—The depression in the English iron market has not passed away during the past week; on the contrary, it has become rather deeper. Pig-iron is without animation. In the North of England pig metal has been flat, Middlesbrough No. 3 having receded 1s. 6d. per ton. Scotch makers' iron is also quieter, and lower in price, quotations having dropped from 9d. to 3s. 6d. per ton, makers being rather anxious to book contracts with the shipping demand falling off. The warrant market is lifeless; Glasgow warrants are fairly steady, but Middlesbrough warrants have experienced a fall of 1s. 10d. per ton. There is but a poor demand for hematite iron both on the west and east coasts. Although makers in the north-west are quoting 57s. 6d. to 60s. for mixed numbers of Bessemer, a few sales have been made at 54s., the price of hematite warrants. The finished iron market is weak and dull, and this is almost equally true of steel; but steel rails are somewhat better enquired for in the north-west, and keep steady. Tinplates are improving. The reports regarding shipbuilding are discouraging, speaking generally. Engineers, especially those making marine machinery, are still fairly well employed, but there is slackness here and there.—*Iron.*

Berlin.—The details of a prospectus of a newly founded "Crystal Palace Company" are circulating in the local press. The Company intends putting up a collection of buildings devoted entirely to public entertainment. These will include a theatre with 1,700 seats, a large concert-hall for an audience of 1,500, four large assembly-rooms, with stages attached; a public dancing saloon, an aquarium, a diorama, and an extensive bazaar; besides restaurants of various nationalities. The whole group is to be connected by means of a system of arcades, which, whilst open in summer, will be kept closed during the winter season. The total estimate for the buildings shows the figure 200,000*l.*, whilst the annual expenditure is estimated at about 35,000*l.* If the project be really carried out under good practical management, it seems likely to be a success.

The Fine Art Exhibition at Cordwainers' Hall.—The Cordwainers' Company have resolved to keep open the Fine Art Exhibition, at the Hall of the Company, No. 7, Cannon-street, E.C., for another month, from the 17th instant, charging one shilling for admission, and devoting the proceeds to the fund now being raised for the relief of the survivors of the Balaclava Charge. We made brief mention of the Exhibition in the *Builder* for April 26, p. 310. The Exhibition is well worth seeing as an exhibition, apart from the laudable object to which the proceeds of the extra month's opening are to be devoted.

New School Buildings at Zurich.—A large school building, containing twenty-two classrooms, three large halls, and having two gymnasiums attached, is to be erected here at a cost of 680,000 francs, and a competition for the building has been opened to Swiss architects.

St. James's (R.C.) Church, Liverpool.—On the 4th inst. the R.C. Bishop of Liverpool opened a new high altar and reredos at St. James Church, Marsh-lane, Liverpool, the interior of which was illustrated in the *Builder* for March 27, 1886. The new altar and reredos, with screens and alabaster rails, have been presented by Mrs. E. Lynch, in memory of her brother, the late Mr. Christopher J. Corbally; and have been nearly two years in hand. The reredos is a departure from the regulation type of the modern R.C. reredos, and is carried round the chancel to a height of 25 ft., the upper portion of the side walls above the arcading being lined with slabs of rouge fleuri marble, and there are medallions with paintings of the Evangelists, by Westlake, on gold grounds. A central composition on the east wall has two tiers of niches, and rises to the east window-sill level. The window will later on be filled with stained glass, and complete the whole composition at a height of 50 ft. The niches have a series of twelve figures in polished white alabaster. Our Lord in Majesty, St. Joseph, the Blessed Virgin, SS. Peter and Paul, and others. The altar, throne, and tabernacle are of white polished alabaster and Irish and Derbyshire fossil marbles; and there is a relievo in the frontal of the Last Supper, and at either corner figures of adoring angels. The wall arcade is worked in polished light alabaster, with Kerry red shafts and Connemara green veined panels. These marbles have all been arranged on the old North Italian model as to tone and figure, and are stated to harmonise well with the red stone of the pillars, arches, vaulting ribs, and stonework of the church. Messrs. J. & H. Patteson, of Manchester, have executed the marble and alabaster work, including the carving; Mr. Boulton, of Cheltenham, executed the figures; and Messrs. Hardman, Powell, & Co., the tabernacle door, of chased, enamelled, and engraved metal, richly gilded, and enriched with rock crystals. Mr. C. Hadfield, F.R.I.B.A., of Sheffield, was the architect.

Rainfall of the Globe.—The usual monthly meeting of the Royal Meteorological Society was held on Wednesday evening, the 21st inst., at the Institution of Civil Engineers, 25, Great George-street, Westminster, Mr. Baldwin Latham, F.G.S., President, in the chair. Mr. W. B. Tripp, M.Inst.C.E., read a paper on "The Rainfall of the Globe." It was a comparative chronological account of some of the principal rainfall records. The earliest record was that of Paris, which commenced in 1689. The English records began in 1726. The rainfall observations in the southern hemisphere did not extend over a very long period; at Adelaide they were commenced in 1839, but they do not go back further than 1866 for New Zealand. The greatest fall in any particular year at the stations given by the author was 160·9 in. at St. Bernard in 1839, and the least, 3 in., at Sandiego, in California, in 1863. By combining the stations in the northern and southern hemispheres, the author found that in recent times the years with the highest average rainfall were 1878, 1879, and 1883, and the years with the lowest average were 1854 and 1861.

The Sanitary Institute.—At a meeting of the Council of this Institute, held on May 14, a scheme was adopted for establishing periodical examinations for inspectors of nuisances at various centres throughout England. Mr. Arthur Cates, F.R.I.B.A., Mr. Alfred E. Harris, L.R.C.P., and Mr. S. W. North were elected Fellows; four members and twenty-four Associates were also elected. Twenty-three applications were read for election at the next meeting.

The Church of St. Paul, Preston, has been enriched by the addition of a painted window in memory of John and Sarah Dewhurst. The window, which is the gift of their children, has subjects of "Joseph honouring his father" and "Solomon honouring his mother," illustrated with rich ornamental surroundings in character with the church. Messrs. Charles Evans & Co., of London, have executed the window.

Appointments.—Mr. W. Grant, of the Borough Engineer's office, Plymouth, has received an appointment as assistant in the Borough Engineer's office, Croydon; and Mr. G. Reginald Davey, late of the same office, has been appointed assistant to the County Surveyor of West Sussex. They were both pupils of Mr. Geo. D. Bellamy, M. Inst. C.E., Borough and Water Engineer, Plymouth.

New Library at Streatham.—The new library which, together with the site, is to be presented to the parish of Streatham by Mr. Henry Tate, has been commenced. The style of the building is Greek, and the whole of the facing is to be Portland stone, the most prominent feature being a large cupola (covered with copper and supported on an arcade) over the main entrance. The floors of all public rooms are to be of wood blocks, and the walls plastered and decorated and the coved ceilings in fibrous plaster. The contractors for the building and fittings are Messrs. Higgs & Hill, and the cost (exclusive of site) about 6,000*l.* Mr. Sidney R. J. Smith is the architect.

Dissolution of Partnership.—We are informed by Messrs. Henry Saxon Snell and Alfred Saxon Snell that their partnership has been dissolved by mutual consent, and that each of them will henceforth practise on his sole account. The dissolution of partnership will not affect their work or commissions now in progress. We understand that it is the intention of Mr. Henry Saxon Snell to restrict his practice generally to that of consulting architect, so far as consistent with his official appointments.

Freiberg.—A new chimney, having a height of some 450 ft. to an interior diameter of about 15 ft., is being built on the grounds of the Halsbruecke Smelting Works in this town, and as this erection is being placed on a piece of ground the summit of which is 260 ft. higher than the surroundings, the mouth of the chimney will be fully 710 ft. above the floor level of the workshops. The chimney will show a square base of 40 ft. side.

PRICES CURRENT OF MATERIALS.

TIMBER.	£. s. d.	£. s. d.
Greenheart, B.G. ....ton	6 10 0	7 10 0
Teak, E.I. ....load	11 0 0	14 0 0
Sequoia, U.S. ....foot cube	0 2 3	0 3 0
Ash, Canada....load	3 0 0	4 10 0
Birch ,, ...	3 0 0	5 0 0
Elm ,, ...	3 10 0	4 15 0
Fir, Dantsic, &c....	1 15 0	3 10 0
Oak ,, ...	2 10 0	4 10 0
Canada	5 10 0	6 10 0
Pine, Canada red	2 10 0	3 10 0
,, yellow	2 0 0	5 5 0
Lath, Dantsic....fathom	5 0 0	6 0 0
St. Petersburg	5 0 0	7 0 0
Wainscot, Riga, &c. ....log	0 0 0	0 0 0
Deals, Finland, 2nd and 1st. std. 100	7 10 0	10 0 0
,, ,, 4th and 3rd	7 0 0	7 10 0
Riga	6 0 0	8 10 0
St. Petersburg, 1st yellow	9 10 0	14 0 0
,, 2nd ,, ...	7 10 0	9 0 0
,, white	6 10 0	10 0 0
Swedish	7 0 0	15 10 0
White Sea	8 0 0	17 0 0
Canada, Pine, 1st	15 0 0	26 0 0
,, ,, 2nd	10 0 0	16 10 0
,, ,, 3rd, &c.	7 0 0	10 0 0
,, Spruce, 1st	8 15 0	11 0 0
,, ,, 3rd and 2nd ..	6 10 0	8 10 0
New Brunswick, &c.	6 0 0	8 0 0
Battens, all kinds	5 0 0	16 0 0
Flooring Boards, sq., 1 in., prepared, First	0 10 0	0 14 0
Second	0 8 0	0 10 6
Other qualities	0 6 0	0 7 9
Cedar, Cuba ....foot	0 0 4	0 0 4½
Honduras, &c.	0 0 4	0 0 4½
Mahogany, Cuba....	0 0 4½	0 0 6½
St. Domingo, cargo average ..	0 0 5	0 0 6½
Mexican ,, ...	0 0 4½	0 0 5½
Tobasco ,, ...	0 0 5½	0 0 6½
Honduras ,, ...	0 0 5½	0 0 6½
Box, Turkey ....ton	4 0 0	13 0 0
Rose, Rio	14 0 0	20 0 0
Bahia	13 0 0	18 0 0
Satin, St. Domingo....foot	0 0 6	0 1 3
Porto Rico	0 0 9	0 1 3
Walnut, Italian	0 0 4	0 0 7
METALS.		
IRON—Bar, Welsh, in London tn	6 17 6	8 0 0
,, ,, at works in Wales	6 10 0	7 0 0
,, Staffordshire, in London..	8 0 0	8 10 0
COPPER—British, cake and ingot	56 0 0	57 0 0
Best selected	59 0 0	59 10 0
Sheets, strong	66 0 0	0 0 0
Chili, bars	52 15 0	0 0 0
YELLOW METAL....lb.	0 0 5½	0 0 0
LEAD—Pig, Spanish ....ton	13 0 0	0 0 0
English, com. brands	13 2 6	13 5 0
Sheet, English, 3 lbs. per square foot and upwards....	15 0 0	0 0 0
Pipe	15 10 0	0 0 0
TIN—		
Straits	95 0 0	0 0 0
Australian....	95 0 0	0 0 0
English Ingots....	98 0 0	0 0 0
OILS.		
Linseed ....ton	23 15 0	23 17 6
Cocoanut, Cochin	29 10 0	0 0 0
Cocoanut, Ceylon	25 5 0	25 10 0
Palm, Lagos	25 10 0	25 15 0
Rapeseed, English pale	32 10 0	0 0 0
,, brown	30 15 0	0 0 0
Cottonseed, refined	22 10 0	0 0 0
Tallow and Oleine	21 0 0	40 0 0
Lubricating, U.S.	5 10 0	6 0 0
,, refined	7 0 0	12 0 0
TAR—Stockholm....barrel	1 6 0	0 0 0
Archangel....	0 16 9	0 0 0

COMPETITIONS, CONTRACTS & PUBLIC APPOINTMENTS.

Epitome of Advertisements in this Number.

COMPETITIONS.

Nature of Work.	By whom Required.	Premium.	Designs to be delivered.	Page
Re-construction of Portion of Public Hall...	Barnsley Town Council	20 Guineas	June 9th	xi.
Public Library.....	Bermondsey Public Libraries Commrs. ...	Not stated	July 5th	xi.
New Buildings.....	Ashton, Stalybridge, &c. Carriage Co. Limited	£50, £30, & £20.....	July 14th	ii.

CONTRACTS.

Nature of Work or Materials.	By whom Required.	Architect, Surveyor, or Engineer.	Tenders to be delivered.	Page.
Wood Paving Works	Fulham Vestry.....	J. P. Norrington.....	May 28th	ii.
Granite Paving	Clerkenwell Vestry.....	*Official*	May 29th	xi.
Flood Works	Leicester Corporation	E. G. Mawbey	May 30th	ii.
Limestone Paving	Birmingham Public Wks Committee	W. S. Till	May 31st	ii.
New Offices	Frome Union...	Halliday & Anderson...	June 2nd	xii.
Waterworks	Hythe (Kent) Corp. ...	A. R. Stenning.....	do.	xii.
Supply of Timber	Epsom Union	.....	do.	xii.
Tarpaving and Kerbing Footpaths	Brentford Local Board	J. H. Strachan.....	June 3rd	xii.
Making-good Street	Southend Local Board	Peter Dodd	do.	xii.
Painting, &c., Works at Infirmary	Paddington Guardians	A. & C. Harston	do.	xi.
Bath-room at Schools, Enfield	Edmonton Union.....	T. E. Knightley	do.	xii.
Enlargement of Colchester P.O.	Com. of H.M. Works...	*Official*	do.	ii.
Reparation and Cleansing of Sewers	Com. of Sewers	do.	do.	xi.
Painting, &c., Works at Asylum	Managers, Poplar, &c., Sick Asylum District	A. & C. Harston	do.	xi.
Roadmaking Works	Willesden Local Board	O. Claude Robson	do.	xi.
Painting, Internal Cleansing, &c., Infirmary	Fulham Union.....	*Official*	June 5th	ii.
Asphalte Paving	Finchley Local Board	do.	June 9th	xii.
New Street Works	St Giles (Camberwell) Vestry	do.	do.	xi.
Waterworks	Sandbach Local Board	W. Wyatt	do.	xii.
General Paving Works.....	West Ham Council.....	Lewis Angell.....	June 10th	xi.
Works and Materials.....	do.	do.	do.	xi.
Main Drainage Works	Daventry Corporation	C. N. Lailey	June 12th	xi.
Broken Granite	Grays Thurrock L. B.	*Official*	do.	xii.
Alterations, &c., to Vestry Hall.....	St. John (Hampstead) Vestry	do.	do.	xii.
Four New Houses and Alterations, Norfolk	Admiralty	do.	June 13th	ii.
Enlarging and Deepening Wells	Colchester Corporation	Chas. E. Bland.....	June 16th	ii.
Enlargement of County Hall, Lewes	East Sussex C. C.	S. Denman.....	do.	xi.
Supply of Timber	Eton Union	*Official*	June 17th	xii.
New Premises, Devon	Wilts and Dorset Banking Company.....	G. M. Silley	Not stated	xii.
Block of Schools	Tottenham School Bd.	E. B. Ellis	do.	xi.
Theatre and Concert Hall, Ipswich.....	Ipswich Lyceum Co. Ltd.	A. Pearce	do.	xi.
Painting Works, Portsea	War Department.....	*Official*	do.	ii.
Painting, &c., Works, Isle of Wight.....	do.	do.	do.	xi.
Painting, &c., Works, Plymouth Sub-Dist.	do.	do.	do.	ii.

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Advertised.	Salary.	Applications to be in.	Page.
Inspector of Works.....	Brighton Town Council	£3 weekly	May 29th	xviii.
Temporary Assistants (two)	Harrogate Corporation	Not stated	May 30th	xviii.
Building Inspector and Clerk of Works	do.	do.	do.	xviii.
Borough Surveyor, &c.....	Hertford Corporation...	£250	May 31st	xviii.
Surveyor	Rawtenstall Local Bd.	£175, &c.....	June 3rd	xviii.

TENDERS.

[Communications for insertion under this heading must reach us *not later than* 12 *noon on Thursdays.*]

AUDENSHAW.—For pulling down and rebuilding the "Sun" Inn, Hooley-hill. Mr. J. H. Burton, architect, Warrington-street, Ashton-under-Lyne :—

Z. Pike, Hooley-hill	£1,958 0 0
W. H. & H. C. Brown, Stockport ..	1,684 0 0
Jos. Davison, Manchester	1,659 0 0
Jabez Gibson, Dukinfield	1,640 0 0
J. W. Williamson, Ashton-under-Lyne.....	1,639 0 0
R. Whitell, Manchester	1,638 0 0
Ed. Kirkby, Ashton-under-Lyne ..	1,625 0 0
Allen Holmes, Ashton-under-Lyne.	1,584 0 0
Owen Williams, Manchester	1,579 0 0
Garside, Barnes, & Co., Stalybridge	1,560 0 0
H. Gardner & Co., Ashton-under-Lyne.....	1,557 10 0
Underwood & Bro., Dukinfield	1,526 0 0
John Robinson, Ashton-under-Lyne	1,494 0 0
Thos. Storer, Denton (accepted) ..	1,350 0 0

BISHOPSTOKE.—For alterations and additions to the "Anchor" public-house, for Messrs. Strong & Co. Mr. W. H Mitchell, architect, Southampton :—

T. J. Jukes	£903 0 0
H Stevens & Co.	893 0 0
J. Bull, Sons, & Co., Limited.....	874 0 0
Jonas Nichols (accepted).....	850 0 0

[All of Southampton.]

CHESHAM.—For extension and alterations to factory, New Town, Chesham, for Messrs. Geo. Wheeler & Co. Mr. Geo. H. Green, architect and surveyor, Chesham :—

G. Green, Aylesbury	£542 0 0
W Harding, Chesham	487 0 0
A. Mead, Chesham.....	415 0 0
Abbott & Son, Chesham (accepted)..	358 0 0
Fredk. Darvell (too late).....	430 0 0

CRICCIETH.—For the extension of main sewers and works connected therewith. Mr. Thomas Roberts, Assoc.M.Inst C.E., engineer :—

D. M. Roberts, Pentrefelin.....	£383 5 4
Hugh Roberts, Groeslon, Carnarvon	328 17 0
Humphrey Thomas, Criccieth	304 7 9
William Thomas, Liverpool (accepted)	297 14 0

[Engineer's estimate, £302.]

FOREST GATE.—For additions and alterations to steam laundry at Forest Gate, for Mr. B. L. James. Mr. W. Styche, architect :—

Gregar.....	£1,721 0 0
Sharp	1,390 0 0
Hooking.....	1,339 0 0
Yates	1,190 0 0
Neal.....	1,172 0 0
North	1,108 0 0
Watson, Ilford (accepted)	1,044 0 0
For Boiler-Setting and Shaft.	
Noble	£263 0 0
Howlett.....	249 0 0
Tymn	198 0 0
Watson, Ilford (accepted)	190 0 0
Neal	178 0 0
Yates	172 0 0

HARROW.—For the erection of a factory at Harrow. Mr. Charles Bell, architect. Quantities by Mr. Henry Lovegrove :—

Killby & Gayford	£9,930 0 0
Nightingale	9,883 0 0
Anley	9,786 0 0
Chas. Wall.....	9,775 0 0
Smith & Sons	9,127 0 0
Allen & Sons (accepted)	7,563 0 0

LINCOLN.—For new church for the united Parishes of St. Nicholas and St. John, Lincoln, for the Reverend Canon Blenkin.—Mr. E. P. Loftus Brock, F.S.A., architect :—

Chas. Baines, Newark	£2,270 0 0
S. & S. Pattinson, Ruskington	2,090 0 0
H. S. & W. Close, Lincoln	1,975 0 0
W. Wade, St. Neot's	1,958 0 0
Wm. Wright & Sons, Lincoln	1,841 0 0

LONDON.—For the erection of Westfield College, Hampstead. Mr. Falconer MacDonald, architect, 139, Oxford-street, W. Quantities by Messrs. Stoner & Sons :—

		Works to old house.	
Holliday & Greenwood	£10,370 ..	£486 ..	£10,856
Bush & Sons	10,235 ..	476 ..	10,711
Colls & Sons	10,080 ..	463 ..	10,543
Peto Bros.	9,840 ..	485 ..	10,325
Simpson & Sons	9,859 ..	459 ..	10,318
Holloway Bros.	9,882 ..	395 ..	10,277
Higgs & Hill	9,484 ..	370 ..	9,854

LONDON.—For erecting New Central Electric Lighting Station at Notting Hill. Mr. John Slater, architect. Quantities by Mr. A. Boxall :—

Firbank	£12,500 0 0
Eckersley & Co.....	12,000 0 0
Colls & Sons	10,837 0 0
Macey & Sons.....	10,336 0 0
Holland & Hannen	10,267 0 0
Holloway Bros.	10,085 0 0
Killby & Gayford	9,427 0 0

LONDON.—For the enlargement of the Montem-street School, Tollington Park, by 400 places, and also the provision of a Cookery Centre on the site, for the School Board for London. Mr. T. J. Bailey, architect :—

		If brickwork is built in cement.
Killby & Gayford	£4,527	£4,620
E. Lawrance & Sons.....	4,470	4,545
G. S. S. Williams & Son	4,277	4,372
B. E. Nightingale	4,245	4,329
Dove Bros.*.....	4,162	4,282
W. Goodman	3,613	3,708

*Recommended by the Works Committee for acceptance.

LONDON.—For enlargement of schools, parish-room, &c., in connection with St. Stephen's Church, South Lambeth. Mr. E. Turner Powell, architect :—

Maxwell	£1398 0 0
Pinniker	1333 0 0
Lathey	1270 0 0
Lapthorne & Co.	1249 0 0

LONDON.—For the erection of stable buildings at Warwick-place, Upper White Cross-street. Messrs. Hudson & Booth, architects. Quantities by Mr. Henry Lovegrove :—

Morter	£2,166 0 0
Greenwood & Son	2,139 0 0
F. & H. F. Higgs.....	2,125 0 0
Dabbs	2,119 0 0
Nightingale	2,089 0 0
Hall, Beddall, & Co.	1,994 0 0
Spencer & Co.	1,970 0 0

LONDON.—For completion of tower and spire to St. Paul's Church, Upper Norwood. Messrs. Elkington & Son, architects, 95, Cannon-street, E.C. :—

Bryan	£1,040 0 0
Downs.....	925 0 0
Jerrard	889 0 0
Smith & Son	873 0 0
Jas. Greenwood & Son	852 0 0

LONDON.—For the completion of the Printers' Almhouses, Wood Green. Mr. Charles Bell, architect. Quantities by Mr. Henry Lovegrove :—

T. W. Woodbridge	£2,487 0 0
G. Wagstaff & Son	2,166 0 0
W. D. Palmer	2,100 0 0
G. E. Todd	2,095 0 0
John Mills (accepted)	2,090 0 0
Rudd & Co. (Grantham)	2,087 0 0

LONDON.—For adapting Nos. 139, 140, Tottenham Court-road, to the requirements of Messrs. Chas. Baker & Co. Messrs. N. S. Joseph & Smithem, architects, 45, Finsbury-pavement, E.C. :—

Scrivener & Co.....	£2,720 0 0
Patman & Fotheringham.....	2,681 0 0
Drew & Cadman	2,489 0 0
Internal Fittings.	
Drew & Cadman	473 16 0
G. Colls & Co.	412 0 0

LONDON. — For alterations at 9, Bishop's-road, Paddington, for the Phœnix Brewery Co. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C. :—

Tyerman	£517 0 0
Smith	510 0 0
Ivory	485 0 0
Courtney & Fairbairn (accepted)....	460 0 0
Counter, Cabinet, and Pewtering.	
T. H. Matthews (accepted)	£117 10 0
Gasfitting.	
Myers (accepted)	44 16 0

LONDON. — For alterations at the "Red Lion" Blackman-street, Borough, S.E., for Messrs. Poole & Venner. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C. :—

Allen & Sons.....	£1,520 0 0
Todd	1,075 0 0
Hough.....	1,015 0 0
Spencer	970 0 0
Mowes & Son	946 0 0
Voller (accepted)	896 0 0

LONDON.—For alterations and repairs to the "Princess Royal" public-house, Sydney-street, Mile End, E., for Mr. F. Garner. Mr. Joseph G. Needham, architect, 11, Powerscroft-road, Clapton, N.E. :—

Johnson Bros.....	£315 0 0
Mower & Son	230 0 0
A. & A. Wilson	228 0 0
Staines & Son	222 0 0
A. Hood (accepted)	205 0 0
Gas-fittings.	
Ungar & Co.	£44 16 0

LONDON.—For alterations and repairs to warehouse, Farringdon-road. Mr. H. Lovegrove, surveyor :—

W. D. Palmer	£553 0 0
Sage & Co.	549 0 0
W. V. Gow	530 0 0
Drew & Cadman	460 0 0
G. Colls	440 0 0

LONDON.—For block of model dwellings, Abbey-street, Bermondsey. Mr. Charles Bell, architect :—
M. Scott £7,838 0 0

LONDON.—For alterations, No. 3, Bow-lane, E.C. Mr. Charles Fowler, architect. Quantities by Mr. Henry Lovegrove :—

Clarke & Bracey	£1,028	0	0
Heeps	987	0	0
Larter & Son	942	0	0
Simpson & Son	851	0	0
Lidstone & Son	829	0	0

LONDON.—For making-up and paving Mendora-road, for the Vestry of Fulham. Mr. W. Sykes, New Streets Surveyor :—

Nowell & Robson, Kensington	£1,005	0	0
Neave, Paddington	975	0	0
Rogers, Notting-hill	933	0	6
Tomes & Wimpey, Hammersmith	920	0	0
Nash, Fulham	851	0	0
Greenham, Hammersmith	833	0	0

LONDON.—For the formation and metalling of roads, Barkston-gardens, South Kensington, for Mr. John R. Roberts. Mr. Wm. Weaver, Surveyor :—

	Flints.	Granite.
Neave & Son	£410	£387
Rogers & Co.	400	387
J. Bowles	390	390
Nowell & Robson	384	372
Joseph Mears (accepted)	380	365

LONDON.—For alterations, decorations, and fittings in adapting the old Eastern District Post-office, 226, Commercial-road, E., into a café and club, for the Tea Growers' Association. Mr. A. H. Thompson, architect :—
E. Triggs (accepted) £1,111 5 0
[No competition.]

LONDON.—For shoring, taking down, and re-building party-wall between 15 and 16, Long-acre, W.C. Messrs. Evans & Deacon, surveyors :—
E. Triggs (accepted) £454 0 0

LONDON.—For alterations, decorations, and fittings in adapting premises at 27 and 28, Whitechapel-road, E., for a café and club for the Tea Planters' Association. Mr. A. H. Thompson, architect :—
E. Triggs (accepted) £1,480 4 11
[No competition.]

LONDON.—For alterations and decorations at 52, Oxford-street, W., for the Medical Battery Co. Messrs. Benison & Bargman, architects :—
E. Triggs (accepted) £595 0 0
[No competition.]

LYMINGTON.—For rebuilding the "Dorset Arms," for Messrs. Styring & Co. Mr. W. H. Mitchell, architect, Southampton :—

T. J. Jukes, Southampton	£900	0	0
A. Wheeler, Lymington	898	15	0
H. Stevens & Co., Southampton*	826	0	0

* Accepted.

SOUTHAMPTON.—For alterations and additions to the Wilts and Dorset Banking Company's premises. Mr. W. H. Mitchell, architect, Southampton :—

Webb & Co., Salisbury	£4,698	0	0
T. H. Kingerlee, Oxford	4,547	0	0
J. Bull, Sons, & Co., Limited, Southampton	4,384	0	0
H. Stevens & Co., Southampton	4,357	0	0
W. Franklin, Southampton	4,217	0	0
W. R. Light & Co., Portsmouth	4,109	0	0
J. Crook & Son, Southampton	4,100	0	0
Morgan, Isted, & Morgan, Southampton	3,946	0	6
D. W. Lewis, Southsea (accepted)	3,852	0	0

TOTTENHAM.—For building three houses in Pembroke-road, Page Green, Tottenham. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C.

Hayworth	£945	0	0
Goodall (accepted)	900	0	0

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